

Permit No. AZMSG2019-002



**STATE OF ARIZONA
DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
PHOENIX, ARIZONA 85007**

**ARIZONA POLLUTANT DISCHARGE ELIMINATION SYSTEM
GENERAL PERMIT FOR STORMWATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL ACTIVITY – MINERAL INDUSTRY
TO WATERS OF THE UNITED STATES**

This permit provides authorization to discharge under the Arizona Pollutant Discharge Elimination System (AZPDES) program, in compliance with the provisions of the Arizona Revised Statutes, Title 49, Chapter 2, Article 3.1, the Arizona Administrative Code (A.A.C.), Title 18, Chapter 9, Articles 9 and Chapter 11, Article 1, and the Clean Water Act as amended (33 U.S.C. 1251 et seq.).

This general permit specifically authorizes stormwater discharges associated with category iii, Mineral Industry sites, pursuant to 40CFR 122.26(b)(14) in Arizona. All discharges authorized by this general permit shall be consistent with the terms and conditions of this general permit.

This general permit becomes effective on January 1, 2020.

This general permit and the authorization to discharge expire at midnight, December 31 2024.

Issued this 15th day of May, 2019.

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY


Trevor Baggione, Director
Water Quality Division

**AZPDES MULTI-SECTOR GENERAL PERMITS FOR STORMWATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL ACTIVITY – MINERAL INDUSTRY**

TABLE OF CONTENTS

1.0 Coverage under this Permit 1

1.1 Eligibility 1

1.2 Permit Compliance..... 6

1.3 Authorization under this Permit 6

1.4 Coverage Under Alternative Permits 9

1.5 Terminating Permit Coverage 10

1.6 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements .. 10

2.0 Effluent Limits and Control Measures 12

2.1 Water Quality-Based Standards 12

2.2 Control Measures and Effluent Limits 13

3.0 Corrective Actions 19

3.1 Corrective Action Triggers..... 19

3.2 Corrective Action Deadlines, Documentation, and Reporting 19

4.0 Inspections 21

4.1 Routine Site Inspections 21

4.2 Visual Assessment of Stormwater Discharges 22

5.0 Stormwater Pollution Prevention Plan (SWPPP) 25

5.1 Contents of the Site’s SWPPP 25

5.2 Signature Requirements..... 26

5.3 Required SWPPP Modifications 26

5.4 SWPPP Availability 26

5.5 SWPPP Submittal 26

5.6 Additional SWPPP Documentation Requirements 27

6.0 Analytical Monitoring Program..... 29

6.1 Analytical Monitoring Procedures..... 29

6.2 Required Monitoring 31

6.3 Accelerated Monitoring 32

6.4 Exemptions or Exceptions to Analytical Monitoring..... 32

6.5 Submittal of Monitoring Data 33

7.0 Reporting and Recordkeeping..... 35

7.1 Electronic Discharge Monitoring Report (e-DMR) 35

7.2 Other Reporting Requirements 35

7.3 Recordkeeping 36

7.4 Addresses for Reports 36

Part 8 – Sector-Specific Requirements for Industrial Activity..... 37

Subpart G – Sector G – Metal Mining 37

Subpart H – Sector H – Coal Mines and Coal Mining-Related Facilities (RESERVED) 48

Subpart I – Sector I – Oil and Gas Extraction (RESERVED) 49

Subpart J – Sector J – Non-Metallic Mineral Mining and Dressing. 50

Appendices

Appendix A. Definitions, Abbreviations, and Acronyms (for the purposes of this permit).

Appendix B. Standard Permit Conditions

Appendix C. Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness Dependent Metals

1.0 Coverage under this Permit

1.1 Eligibility

1.1.1 Industrial Activities and Facilities Covered

This general permit authorizes stormwater discharges to Waters of the U.S., associated with “industrial activities” as defined in Appendix A from sites having primary industrial activities included in Table 1-1. This permit is not authorized for use by sites with stormwater discharges associated with industrial activities on any Indian Country lands in Arizona. USEPA Region 9 is the permitting authority for Indian Country lands in Arizona.

Permit eligibility is limited to discharges from facilities of industrial activity in Sectors G and J (i.e., the “mining sectors”), summarized in Table 1-1. These sector descriptions are based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes. References to “sectors” in this permit (e.g., sector-specific monitoring requirements) refer to these groupings.

If a site is not eligible for authorization under this permit because stormwater is not discharged to a Water of U.S., the operator may elect to obtain a No Discharge Certification through the electronic permitting process in myDEQ, if available.

Table 1-1. Mining Sectors of Industrial Activity Covered by This Permit Derived from Category (iii) of 40 CFR 122.26(b)(14)		
Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code¹	Activity Represented
SECTOR G: METAL MINING (ORE MINING AND DRESSING)		
G1	1021	Copper Ore and Mining Dressing Facilities
G2	1011	Iron Ores
	1021	Copper Ores
	1031	Lead and Zinc Ores
	1041, 1044	Gold and Silver Ores
	1061	Ferroalloy Ores, Except Vanadium
	1081	Metal Mining Services
	1094, 1099	Miscellaneous Metal Ores
SECTOR H: RESERVED (COAL MINES AND COAL MINING-RELATED FACILITIES)		
SECTOR I: RESERVED (OIL AND GAS EXTRACTION)		
SECTOR J: NON-METALLIC MINERAL MINING AND DRESSING		
J1	1442	Construction Sand and Gravel
	1446	Industrial Sand
J2	1411	Dimension Stone
	1422-1429	Crushed and Broken Stone, Including Rip Rap
	1481	Non-metallic Minerals Services, Except Fuels
J3	1499	Miscellaneous Non-metallic Minerals, Except Fuels
	1455, 1459	Clay, Ceramic, and Refractory Materials

Table 1-1. Mining Sectors of Industrial Activity Covered by This Permit Derived from Category (iii) of 40 CFR 122.26(b)(14)		
Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code ¹	Activity Represented
	1474-1479	Chemical and Fertilizer Mineral Mining

¹ A complete list of SIC Codes (and conversions from the newer North American Industry Classification System” (NAICS) can be obtained from the Internet at <http://www.osha.gov> or in paper form from various locations in the document titled *Handbook of Standard Industrial Classifications*, Office of Management and Budget, 1987.

1.1.2 Allowable Stormwater Discharges

The following discharges are eligible for coverage under this permit:

1. Stormwater discharges associated with industrial activity for any primary industrial activities and co-located industrial activities (as defined in Appendix A) except for any stormwater discharges specifically prohibited in Part 8;
2. Discharges that are not otherwise required to obtain AZPDES permit authorization but are commingled with discharges that are authorized under this permit; and
3. Discharges subject to any of the national stormwater specific effluent limitations guidelines listed in Table 2-2.

1.1.3 Allowable Non-Stormwater Discharges for all Sectors of Industrial Activity

Part 1.1.3.1 identifies the non-stormwater discharges allowed under this permit provided the appropriate control measures are designed, implemented, and maintained to reduce the discharge of pollutants, including erosion and sedimentation, and do not cause or contribute to the exceedance of an instream surface water quality standard.

Allowable non-stormwater discharges can be mixed with a discharge authorized by a different AZPDES permit and/or a discharge that does not require AZPDES permit authorization.

1.1.3.1 Allowable Non-Stormwater Discharges for all Sectors of Industrial Activity

When conducted in accordance with part 1.1.3, the following non-stormwater discharge activities or sources are allowed:

1. Emergency/unplanned fire-fighting activities;
2. Firefighting system testing and maintenance, including hydrant flushings;
3. Installation and maintenance of potable water supply systems, including disinfection and water line flushing activities, discharges resulting from pressure releases or overflows, and discharges from wells approved by ADEQ for drinking water use;
4. Uncontaminated condensate from air conditioners, evaporative coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
5. Irrigation drainage and irrigation line flushing;

6. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
7. Pavement wash waters where no detergents or cleaning agents are used, and measures are first taken to remove/pickup solids and liquids, and properly dispose;
8. Routine external building washdown / power wash water that does not use detergents or other cleaning agent (e.g., those containing bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols);
9. Water used to control dust, provided effluent or other wastewaters are not used;
10. Uncontaminated groundwater or spring water;
11. Foundation or footing drains where flows are not contaminated with process materials such as solvents;
12. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the site, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains);
13. Hydrostatic testing of new pipes, tanks or vessels using potable water, surface water, or uncontaminated groundwater;
14. Discharges of water associated with drilling, rehabilitation and maintenance of potable or non-potable water wells and piezometers, or water supply or water quality evaluations including:
 - a. Discharges from any borehole not fully developed;
 - b. Well purging;
 - c. Well/aquifer pump tests not associated with groundwater remediation activities;
 - d. Backflushing of injection wells
15. Non-stormwater discharges subject to an effluent limitation guideline listed in Table 2-2.

1.1.4 Limitations on Coverage

1.1.4.1 Stormwater Discharges Mixed with Non-Stormwater

Stormwater discharges that are mixed with non-stormwater (other than the allowable non-stormwater discharges listed in Part 1.1.3) are not eligible for coverage under this permit.

1.1.4.2 Stormwater Discharges Associated with Construction Activity

Stormwater discharges associated with construction activity are eligible for coverage under this permit as specified in Sector G and J, Part 8 of this permit.

1.1.4.3 Discharges Currently or Previously Covered by another Permit

Unless the permittee receives written notification from ADEQ specifically allowing these discharges to be covered under this permit, the following are not eligible for coverage under this general permit for any of the following:

1. Stormwater or non-stormwater discharges associated with industrial activity that is currently covered under an individual AZPDES permit or an alternative AZPDES general permit and has established numeric water quality-based limitations developed for the stormwater component of the discharge; or
2. Discharges for which any AZPDES permit has been or is in the process of being denied, terminated, or revoked by ADEQ (this does not apply to the routine reissuance of permits every five years).

1.1.4.4 Stormwater Discharges Subject to Effluent Limitations Guidelines

For stormwater discharges subject to effluent limitation guidelines under 40 CFR, Subchapter N, only those discharges identified in Table 2-2 are eligible for coverage under this permit.

1.1.4.5 New Dischargers and New Sources Based on Surface Water Quality Standards

A new discharger or a new source (as defined in Appendix A) is ineligible for coverage under this permit if ADEQ determines that the discharge will cause or contribute to an exceedance of a surface water quality standard. In such a case, ADEQ may notify the applicant that an individual permit is necessary per Part 1.4, or alternatively ADEQ may authorize coverage under this permit when the applicant implements additional control measures, so that discharges from the site will meet applicable surface water quality standards.

1.1.4.6 New Dischargers and New Sources to Impaired Waters

A new discharger or a new source to an impaired water (as defined in Appendix A) is not automatically eligible for coverage under this permit.

1. To receive authorization under this permit, the applicant shall make one of the following demonstrations and retain such documentation with the stormwater pollution prevention plan (SWPPP):
 - a. That the site will employ measures to prevent all exposure to stormwater of the pollutant(s) for which the waterbody is impaired; or
 - b. That the discharge from the site has no potential to contain the pollutants causing impairment; or
 - c. That the discharge is not expected to cause or contribute to an exceedance of an applicable surface water quality standard. The applicant shall demonstrate with data or other technical documentation that either:
 - i. For discharges to waters without an approved or established TMDL, that the discharge of the pollutant for which water is impaired will meet the applicable surface water quality standards, at the point of discharge to the waterbody; or
 - ii. For discharges to waters with an approved or established TMDL, that discharges are consistent with the provision in the TMDL, including established TMDL and implementation plans.

Pursuant to A.A.C. R18-11-109(D)(2), if a receiving water is impaired for suspended solids, an operator seeking authorization to discharge under this permit may satisfy the requirement of Part 1.1.4.6(1)(c)(i) either by discharging only within the first 48 hours after a local storm event, or by demonstrating that any discharge after that time satisfies the requirements of Part 1.1.4.6(1)(c)(i) or (ii).

2. The applicant shall submit:
 - a. The Notice of Intent (NOI) in accordance with Part 1.3.1;

- b. An electronic copy of the SWPPP for ADEQ review. The SWPPP shall describe how the permittee will:
 - i. Monitor for pollutants of concern in the discharge in accordance with Part 6.2.3; and
 - ii. Provide the necessary information or documentation related to the demonstration selected in Part 1.1.4.6(1).
- 3. If the proposed discharge is to a tributary within 2.5 miles upstream of a water or portion thereof classified as impaired and /or not-attaining, the applicant shall submit a copy of the SWPPP electronically with the NOI.
- 4. Within 30 calendar days of receipt of information required in Part 1.1.4.6 (2), ADEQ will notify the applicant in writing that:
 - a. It is acceptable to proceed under the general permit and the permit authorization has been issued; or
 - b. The SWPPP is incomplete or otherwise deficient and must be revised. The applicant shall submit the revised electronic SWPPP to ADEQ for review that addresses the deficiencies as identified in the ADEQ notification; or
 - c. It is not eligible for coverage under this permit and must apply for an individual permit under Part 1.4.

1.1.4.7 New or Expanded Discharges to Outstanding Arizona Waters

- 1. No new or expanded discharges or a new source directly to a water or portion thereof classified as an Outstanding Arizona Water (OAW) (see A.A.C. R18-11-112) are authorized under this permit.
- 2. New or expanded discharges to tributaries upstream of a water or portion thereof classified as an OAW are not automatically eligible for coverage under this permit. To receive authorization for a new or expanded discharge to a tributary upstream of a water or portion thereof classified as an OAW, the applicant shall submit:
 - a. The NOI in accordance with Part 1.3.1;
 - b. An electronic copy of the SWPPP for ADEQ review that demonstrates the discharge will not degrade existing water quality in the downstream OAW and retain documentation supporting this demonstration onsite with the SWPPP. Information relevant to this demonstration may include, but is not limited to, some or all of the following:
 - i. The distance between the discharge and the water or portion thereof that is the OAW;
 - ii. The estimated size (volume) and duration of the discharge;
 - iii. The expected frequency of the discharge;
 - iv. The expected chemical characteristics of the discharge;
 - v. The known or expected water quality of the water or portion thereof that is the OAW during storm events.
- 3. If the proposed discharge is to a tributary within 2.5 miles upstream of a water or portion thereof classified as an OAW the applicant shall submit an electronic copy of the SWPPP that includes a sampling and analysis plan to collect data appropriate to verify the demonstration in subsection b, above.
- 4. Within 30 calendar days of receipt of information required in Part 1.1.4.7 (2), ADEQ will notify the applicant in writing that:
 - a. It is acceptable to proceed under the general permit and the permit authorization has been issued; or
 - b. The SWPPP is incomplete or otherwise deficient and must be revised. The applicant shall submit the revised SWPPP to ADEQ for review that addresses the deficiencies as identified in the notification; or

- c. It is not eligible for coverage under this permit and must apply for an individual permit under Part 1.4.

1.2 Permit Compliance

Any noncompliance with any of the requirements of this permit constitutes a violation of the Clean Water Act and A.R.S. Title 49, Chapter 2, Article 3.1.

1.3 Authorization Under this Permit

1.3.1 Obtaining Authorization to Discharge

1. Before obtaining authorization under this permit, the applicant shall:
 - a. Meet the eligibility requirements in Part 1.1;
 - b. Select and design control measures in accordance with Part 2.2 (such control measure shall be installed and implemented prior to discharge;
 - c. Develop or update a SWPPP according to the requirements in Part 5 of this permit. An applicant seeking authorization, for a new discharge to an impaired water or to a tributary within 2.5 miles upstream of an impaired water (see Part 1.1.4.6) or for a new or expanded discharge to a tributary within 2.5 miles upstream of an Outstanding Arizona Water (see Part 1.1.4.7) is required to submit a copy of the SWPPP electronically to the Department for review. The corresponding review fee (A.A.C. Title 18, Chapter 14, Article 1) shall be submitted electronically using myDEQ at the time the SWPPP is submitted; and
 - d. Submit to the Department a complete and accurate Notice of Intent (NOI); and
 - e. If the site will discharge to a regulated municipal separate sewer system (MS4), the applicant must provide:
 - The name of the MS4 operator; and
 - The surface water that receives the discharge.

NOI will have to be submitted along with the initial application fee(s).

2. Submitting the Notice of Intent (NOI):

The NOI must be submitted electronically using ADEQ's on-line permitting portal myDEQ, by the deadline applicable to your site, listed in Table 1-2.
4. Authorization to Discharge Timeframes
 - a. Routine Authorizations

Unless otherwise notified, the applicant is authorized to discharge stormwater from an eligible site when the Notice of Intent is submitted through the on-line permitting system, myDEQ, and the NOI Certificate is issued to the applicant. The NOI Certificate is issued immediately after the submission of a complete and accurate NOI and the receipt of the applicant's payment. The NOI Certificate will include a unique authorization number (LTF number) and the effective date of permit coverage issued to the applicant.
 - b. Authorizations to Discharge for New Dischargers to Impaired Waters and New or Expanded Discharges to Tributaries of OAWs.

Unless otherwise notified, an applicant subject to Part 1.1.4.6 or 1.1.4.7 is authorized to discharge stormwater from an eligible site upon receipt of the Notice of Intent Certificate or 30 calendar days after a complete and accurate SWPPP is received by the Department, whichever is earlier. When the SWPPP is approved by ADEQ, the applicant will receive the Notice of Intent Certificate.
 - c. NOIs Requiring Additional Evaluation

Authorization to discharge will not occur for up to 30 calendar days in the event that a SWPPP review is required. The permittee is authorized to discharge stormwater from an eligible site upon receipt of the Notice of Intent Certificate or 30 calendar days after a complete and accurate SWPPP is received by the Department, whichever is earlier. When requesting a voluntary SWPPP review, coverage is granted when ADEQ deems the SWPPP complete and accurate. When the SWPPP is approved by ADEQ, the applicant will receive the Notice of Intent Certificate.

- d. Requirement to Obtain Alternate Coverage.
ADEQ may require the operator to submit an application for an individual AZPDES permit, as detailed in Part 1.4. In these instances, ADEQ will notify the operator in writing of the request for submission of an individual AZPDES permit application.

5. The time frames for discharge authorization are presented in Table 1-2, below.

Table 1-2. NOI Submittal Deadlines		
Category	NOI Submission Deadline	Discharge Authorization Status ^{1,2}
Existing Dischargers – authorized for coverage under 2010 MSGP.	<p>Submit NOI between January 1, 2020 and February 28, 2020, unless ADEQ notifies the applicant that the deadline was extended.</p> <p>The SWPPP must be updated to ensure that this permit's requirements are addressed prior to submitting your NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's initial fee in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p> <p>If the NOI is not submitted by the deadline, the existing coverage under the 2010 MSGP will be automatically terminated by ADEQ.</p>
Other Eligible Dischargers – in operation prior to the effective date of this permit, but did not obtain coverage under the 2010 MSGP or another AZPDES permit and are not operating consistent with the No Exposure Certificate Conditional Exclusion.	<p>Submit NOI as soon as possible, but no later than 60 calendar days from the permit's effective date, unless the deadline was extended.</p> <p>The SWPPP must be prepared to ensure that this permit's requirements are addressed prior to submitting your NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's NOI fee in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>
New Dischargers – will commence discharging after the effective date of this permit.	<p>Submit NOI as soon as possible, and at least 30 calendar days before discharge is anticipated.</p> <p>The SWPPP must be prepared to ensure that this permit's requirements are addressed prior to submitting your NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's NOI fee in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>

Table 1-2. NOI Submittal Deadlines		
Category	NOI Submission Deadline	Discharge Authorization Status ^{1,2}
<p><u>Change of ownership</u> and/or operation to a new owner or operator whose discharge is authorized under this permit.</p>	<p>Permitted owner or operator shall submit a NOT to ADEQ within 30 calendar days after the new owner or operator assumes responsibility for the site.</p> <p>New owner/operator shall submit a NOI to ADEQ 30 calendar days before taking over operational control or initiating activities at the site.</p> <p>The new owner/ operator shall develop the SWPPP to ensure that this permit's requirements are addressed prior to submitting your NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's NOI fee for the new owner/ operator in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>
<p><u>Change in site location</u> to a new site location, whose discharge is authorized by this permit, including a change in geographic coordinates.</p>	<p>Permitted owner or operator shall submit a NOT to ADEQ within 30 calendar days after the site location changes.</p> <p>New owner/operator of the new site location, shall submit a NOI to ADEQ 30 calendar days before changing site locations.</p> <p>The new owner/operator shall develop the SWPPP to ensure that this permit's requirements are addressed prior to submitting the NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicants NOI fee for the new site location in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>
<p><u>Change in site name</u> to a different site name whose discharge is authorized by this permit.</p>	<p>Permitted owner or operator shall submit a NOT to ADEQ within 30 calendar days after the site location changes.</p> <p>New owner/operator of the new site location, shall submit a NOI to ADEQ 30 calendar days before changing site locations.</p> <p>The SWPPP must be prepared to ensure that this permit's requirements are addressed prior to submitting your NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's NOI fee for the new site name in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>
<p><u>(Changes to the NOI)³ revised or modified NOI</u></p>	<p>Submit a revised NOI to ADEQ within 30 calendar days of the change to NOI information.³</p> <p>The permittee shall update the SWPPP to ensure that this permit's requirements are addressed prior to submitting the revised NOI.</p>	<p>The discharge authorization (Notice of Intent Certificate) is issued immediately after the submission of a complete and accurate NOI, and the receipt of the applicant's NOI fee, if required, in myDEQ (Part 1.3.1(3)(a)), unless ADEQ notifies you that your authorization has been delayed or denied.</p>

¹ If the NOI submission deadline is missed, any and all continued discharges from the industrial activities will be unauthorized under the CWA until they are covered by this or a different AZPDES permit. ADEQ may take enforcement action for any unpermitted discharges.

² Discharges are not authorized if the NOI is inaccurate (incorrect facility name, facility address or facility latitude/longitude) or if you are ineligible for permit coverage. A new fee would be required if a new NOI has to be submitted if the old NOI was deemed to be inaccurate.

³ The permittee is required to submit a revised (modified) NOI for the following changes to their previous application; site contact, change in discharges to MS4, sector, subsector, co-located facilities, acreage exposed to industrial stormwater, primary industrial activity acreage exposed to stormwater, co-located industrial activities acreage exposed to stormwater, SWPPP contact, outfall name, outfall location, number of outfalls, outfalls that are inactivated, receiving water, receiving water type, sampling type, and claiming inactive and unstaffed site status (or reverting back to active and staffed).). There is no fee for modifying or revising a NOI, unless an outfall to a special water is added, which would trigger the SWPPP review fee.

1.3.2 Continuation of Coverage for Existing Permittees After this Permit Expires

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with A.A.C. R18-9-C903(A) and remain in force and effect. Discharges authorized under this permit will automatically remain covered by this permit until the earliest of:

- The operator submits a timely, complete, and accurate NOI requesting authorization to discharge under a renewal or revision of this permit and ADEQ issues an Authorization to Discharge; or
- The operator submits a Notice of Termination (NOT); or
- ADEQ denies coverage under this general permit or denies or issues coverage under an individual permit or other alternative permit for the site's discharges; or
- A formal permit decision is made by ADEQ not to reissue this general permit, at which time ADEQ will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.

1.4 Coverage Under Alternative Permits

1.4.1 ADEQ Requiring Coverage under an Alternative AZPDES Permit

ADEQ may require an operator to obtain authorization to discharge under either an individual AZPDES permit or an alternative AZPDES general permit in accordance with A.A.C. R18-9-C902(A). If ADEQ requires the site to apply for an alternative permit, the Agency will notify the operator in writing that a permit application or NOI is required. This notification will include a brief statement of the reasons for this decision. If ADEQ requires an operator to apply for an individual permit, any applications shall be submitted within 120 calendar days, unless ADEQ provides an extended deadline. In addition, a discharger already authorized under this permit, will be notified of a deadline to file a permit application. Coverage under this permit will terminate immediately if the operator fails to submit an individual AZPDES permit application by the specified deadline. ADEQ may take appropriate enforcement action for any unpermitted discharge.

1.4.2 Permittee Requesting Coverage under an Alternative Permit

An applicant may elect to forego coverage under this general permit by applying for an individual permit. In such a case, the applicant must submit an individual permit application in accordance with the requirements of A.A.C. R18-9-B901(B)(2) to the Department and include reasons supporting the request.

The request may be granted by issuance of an individual permit or authorization of

coverage under an alternative general permit if the Department finds that the reasons are adequate to support the request.

When an individual AZPDES permit is issued to the applicant or the applicant is authorized to discharge under an alternative AZPDES general permit, the authorization to discharge under this permit is terminated on the effective date of the alternate permit.

1.5 Terminating Permit Coverage

1.5.1 Submitting a Notice of Termination (NOT)

To terminate permit coverage, the permittee shall submit a complete and accurate Notice of Termination (NOT). The site's authorization to discharge under this permit terminates immediately once a NOT Summary is received from the Department. Any reporting requirements shall be submitted at the time of termination.

1.5.2 How to Submit the NOT

The permittee must submit the NOT electronically using a valid myDEQ account.

1.5.3 When to Submit a NOT

The permittee shall submit a NOT within 30 calendar days after:

- A new owner or operator assumes ownership or has taken over responsibility for the site.
- The owner or operator changes the geographic location of the site.
- The owner or operator of a site changes the name of the facility.

The permittee may submit a NOT after one or more the following conditions have occurred:

- The permittee has ceased operations at the site, there are not or will no longer be discharges of stormwater associated with industrial activity from the site, and the site has implemented the necessary sediment and erosion control measures; or
- The site meets the requirements for a No Exposure Certification (NEC) and has obtained NEC coverage; or
- The permittee obtained coverage under an individual or alternative general permit for all discharges required to be covered by an AZPDES permit: or
- The permittee has met the requirements of Part 8.G.9.1 or Part 8.J.10.1 and reclamation is complete for all applicable portions of the site; or
- There are no longer discharges of stormwater to Waters of U.S., either directly or by way of conveyance (storm sewer, street, ditch, etc).

The permittee is responsible for meeting the terms and conditions of this permit (including the annual fee) until the site's authorization to discharge is terminated.

1.6 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements

Permit holders of inactive and unstaffed mining facilities may qualify for reduced inspections and monitoring of the no exposure provisions, without certifying "*there are no industrial materials or activities exposed to stormwater*" This exemption is predicated on the following:

- To the extent practicable, the permittee shall implement the following control measures:
 - Industrial materials used in the operations will be removed, covered or kept in appropriate containers or within containment if applicable so as to minimize discharges of stormwater associated with industrial activity as outlined in the site's SWPPP; and
 - Stockpiles, waste rock, tailings and other spoil or waste piles shall be protected from erosion and/ or downstream catchments shall be installed and maintained.
- If circumstances change and the site becomes active and/or staffed, this exemption no longer applies and the permittee shall immediately begin complying with permit requirements as if the site were in the first year of permit coverage, including the requirements for routine site inspections (Part 4.1), visual assessments (Part 4.2), and applicable general analytical monitoring requirements (Part 6.2).
- ADEQ retains the authority to revoke this exemption and/or the monitoring exception where it is determined that the discharge may; cause, or contribute to an exceedance of an applicable surface water quality standard in the receiving water; exceeds an effluent limitations guideline; exceeds a Wasteland Allocation (WLA) for the receiving water; or degrades water quality in an OAW.

To invoke the exemption for an inactive, unstaffed site, the permittee shall do the following:

- Maintain a statement in the SWPPP as required indicating that the site is inactive and unstaffed, in accordance with the substantive requirements of this section. The statement must be signed and certified in accordance with Appendix B, Subsection 9.
- If, during the period of coverage under this permit, the site becomes qualified for the inactive and unstaffed exemption, the permittee shall include the same signed and certified statement as above and retain it with the site's records pursuant to Part 7.4.
- Within 30 days of becoming inactive and unstaffed or reverting back to an active and staffed site, the permittee must modify the NOI, to update the status of the site.

Subject to the requirements above, if the site is inactive and unstaffed, the permittee is not required to conduct four routine site inspections, four wet season visual assessments and general analytical monitoring. The permittee shall conduct one routine site inspection each calendar year in accordance with Part 4.1 or meet the conditional requirements for tri-annual inspections at inactive and unstaffed sites in accordance Part 4.1.2.

The permittee shall also inspect the site whenever there is a reasonable expectation that severe weather or other events may have damaged control measures or increased pollutant discharges.

2.0 Effluent Limits and Control Measures

2.1 Water Quality-Based Standards

2.1.1 Water Quality Standards

The permittee shall control discharge from the site as necessary to not cause or contribute to an exceedance of an applicable surface water quality standard in the receiving water. If at any time the permittee becomes aware, or ADEQ determines, that the site's discharge causes or contributes to an exceedance of an applicable surface water quality standard, the permittee shall take corrective action as required in Part 3.1, document and report the corrective actions as required in Parts 3.2.

ADEQ may impose additional water quality-based requirements on a site-specific basis, or require the operator to obtain coverage under an individual permit in accordance with Part 1.4., if information in the Notice of Intent (NOI), required reports, or from other sources indicates the discharges are not controlled as necessary to not cause an exceedance of an applicable surface water quality standard in the receiving water.

2.1.1.1 Discharges to Water Quality Not-Attaining and Impaired Waters

- a. **Existing Discharges to an Impaired Water with an Approved TMDL (Not-Attaining Water).** If the discharge is to an impaired water with an approved TMDL, or is otherwise referenced in an approved TMDL, the Department may require, as a condition of authorization, additional limits, controls, or analytical monitoring necessary to be consistent with the assumptions and requirements of the applicable TMDL and any available wasteload allocation (WLA). Alternatively, ADEQ will advise the permittee if coverage under an individual permit is necessary in accordance with Part 1.4.
- b. **Existing Discharges to an Impaired Water without an Approved TMDL (Impaired Water).** If the discharge is to an impaired water without an approved TMDL, the permittee shall comply with Part 2.1.1., and the monitoring requirements of Part 6.2.3. This subsection applies to discharges to impaired waters as well as to situations where ADEQ determines that the site's discharge is not controlled as necessary to meet surface water quality standards in an impaired downstream water segment, even if the discharge is to a receiving water that is not specifically identified on a Section 303(d) list.
- c. **New Dischargers or New Sources to an Impaired Water and or Not-Attaining Water.** If the permittee's authorization to discharge under this permit relied on Part 1.1.4.6 for a new discharger or a new source to an impaired and or not-attaining water, the permittee shall implement and maintain any control measures or conditions on the site that enabled it to become eligible under Part 1.1.4.6. The permittee shall modify such measures or conditions as necessary in accordance with any Part 3 corrective actions. In addition, the permittee shall comply with Part 2.1.1 and the analytical monitoring requirements of Part 6.2.3.

2.2 Control Measures and Effluent Limits

The requirement to implement control measures in accordance with Part 2.2.1 applies to all sites. Part 8 contains additional control measures imposed on a sector-specific basis.

2.2.1 Control Measures

The permittee shall select, design, install, and implement control measures in order to meet the requirements in Part 2.1 and Part 2.2.1.

The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications. The permittee may deviate from such manufacturer's specifications, however, the justification for the deviation shall be maintained and documented in the site SWPPP.

If the site's control measures are not effective, the permittee shall modify and/or add additional control measures to meet the requirements of this permit. Regulated stormwater discharges from the site include stormwater run-on that commingles with stormwater discharges associated with industrial activity at the site.

The permittee shall consider all of the control measures listed below for implementation at the site and select those that the permittee determines are appropriate given the site conditions to meet the requirements in Part 2.1 and Part 2.2.1.1. The control measures listed below are not intended to be an exclusive list of necessary control measures. In preparing the SWPPP in accordance with the requirements in Part 5 of this permit, the permittee shall explain the basis for the selection of the control measures.

2.2.1.1 Control Measure Selection and Design Considerations

The permittee shall assess the type and quantity of pollutants likely to discharge in stormwater or allowable non-stormwater from the site when designing and implementing control measures. The permittee shall consider the following when selecting and designing control measures:

- Preventing stormwater from coming into contact with pollutants is generally more effective and less costly than trying to remove pollutants from stormwater;
- Using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in the site's stormwater discharge;
- Assessing the type and quantity of pollutants, including their potential to impact the receiving water(s) quality, is necessary in order to design effective control measures that achieve permit limits;
- Minimizing impervious areas at the site and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams, although care must be taken to avoid groundwater contamination;
- Attenuating flow using open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
- Using containment to intercept stormwater flows before they leave the site, such as directing flows to non-discharging areas (pits) or installing runoff containment;
- Conserving and/or restoring of riparian buffers help protect streams from stormwater runoff and improve water quality; and
- Using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

2.2.1.2 Technology Based Effluent Limits

The permittee shall comply with the following non-numeric effluent limits (except where otherwise specified in Part 8) as well as any sector-specific non-numeric effluent limits in Part 8:

2.2.1.2.1 Minimize Exposure

The permittee shall minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff in order to minimize pollutant discharges by implementing measures such as the following:

- Locating industrial material and activities inside or protecting with storm resistant shelter (although significant enlargement of impervious surface area is not recommended);
- Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
- Locating materials, equipment, and activities so that potential leaks or spills are contained or able to be contained or diverted before discharging off-site;
- Using spill/overflow protection;
- Clean up spills and leaks promptly using dry methods (e.g. absorbents);
- Covering fueling area(s) or minimize stormwater run-on/runoff to fueling area(s);
- Store leaky vehicles and equipment indoors, or if stored outdoors, use drip pans and absorbents;
- Draining fluids from equipment and vehicles that will be decommissioned, and for any equipment and vehicles that will remain unused for extended periods of time;
- Performing all vehicle and /or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also capture any overspray; and
- Ensuring that all washwater not meeting the requirements in Part 1.1.3.1. (7) and (8), drains to a proper collection system (i.e., not the stormwater drainage system).

2.2.1.2.2 Good Housekeeping

The permittee shall implement good housekeeping measures for all exposed areas that are potential sources of pollutants. Such measures may include, but are not limited to the following:

- Sweep or vacuum at regular intervals;
Keeping materials orderly and labeled;
Storing materials in appropriate containers;
- Cleaning up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
- Using drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;
- Keep dumpster lids closed when not in use. For dumpsters and roll off boxes that do not have lids and could leak, ensure that discharges have a control (e.g., secondary containment, treatment) when needed.
- Minimize the potential for waste, garbage and floatable debris to be discharged by keeping exposed areas free of such materials, or by intercepting them before they are discharged.

2.2.1.2.3 Maintenance

The permittee shall maintain all control measures that are used to achieve effluent limits in this permit in effective operating conditions, as well as all industrial equipment and systems, in order to minimize pollutants in stormwater discharge. This includes measures such as the following:

- Performing inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, plant equipment and systems that could fail and result in contamination of stormwater;
- Maintaining non-structural control measures (e.g., keep spill response supplies available, personnel appropriately trained);
- Inspecting baghouses and removing any accumulated dust at the exterior base of the baghouse;
- Cleaning catch basins.

If control measures are in need of repair or replacement, the permittee shall make any necessary changes as soon as practicable. All reasonable steps shall be taken to minimize the discharge of pollutants until the final repair is completed. This shall include cleaning up any contaminated surfaces so that the material will not be discharged in subsequent storm events. Final repairs or replacement of stormwater controls should be completed as soon as feasible, but no later than 14 calendar days following discovery, or before the next measurable storm event, whichever is sooner.

If necessary changes cannot be implemented within the specified timeframe(s), the permittee shall document within the SWPPP the reasons for the delay, a schedule for completing the necessary changes, date completed, and any back-up control measures in place to ensure compliance with permit requirements, should a runoff event occur while a control measure is off-line (either in part or in whole).

2.2.1.2.4 Spill Prevention and Response Procedures

The permittee shall minimize the potential for leaks, spills, and other releases that may be exposed to stormwater and develop plans for timely and effective clean-up of spills if, or when they occur in order to minimize pollutant discharges. The permittee shall implement spill prevention and response measures, such as:

- Plainly labeling containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- Implement procedures for material storage and handling, including the use of secondary containment and barriers between material storage and traffic areas;
- Develop procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases;
- Keep spill kits on-site and located near areas where spills may occur or a rapid response can be made; and
- Implement procedures for notification of appropriate site personnel and emergency response. Where a leak, spill, or other release occurs that contains a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, the permittee shall notify ADEQ Emergency Response at (602) 771-2330 or, toll free, at (800) 234-5677. Contact information must be in locations that are readily accessible and available.

2.2.1.2.5 Erosion and Sediment Controls

The permittee shall minimize on-site erosion and sedimentation in order to minimize pollutant discharges, including but not limited to measures such as the following:

- Stabilize exposed soil;
- Control and contain runoff and sediment using structural and/or non-structural control measures;
- Place flow velocity dissipation devices at discharge locations and within outfall channels where necessary, to reduce erosion and/or settle out pollutants.

In selecting, designing, installing, and implementing appropriate control measures, permittees are encouraged to consult EPA's internet-based resources relating to Stormwater BMPs for erosion and sedimentation.

If the permittee uses polymers and/or other chemical treatments as part of the controls, the permittee must identify the polymers and/or chemicals used and the purpose in the SWPPP.

2.2.1.2.6 Management of Stormwater Runoff

The permittee shall minimize the discharge of pollutants from the site by implementing control measures, including but not limited to measures such as the following:

- Divert clean stormwater around industrial materials and activities;
- Infiltrate, reuse, contain and reduce impacted runoff, or
- Treat and/or recycle stormwater runoff collected.

In selecting, designing, installing, and implementing appropriate control measures, permittees are encouraged to consult EPA's internet-based resources relating to stormwater runoff management and green stormwater infrastructure.

2.2.1.2.7 Salt Storage Piles or Piles Containing Salt

The permittee shall reduce stormwater runoff to minimize the discharge of pollutants from the salt storage piles or piles containing salt by implementing control measures including, but not limited to measures, such as the following:

- Enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces.
- Implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the salt storage pile.

Salt storage piles do not need to be enclosed or covered if stormwater runoff from the piles is not discharged off-site or if discharges from the piles are authorized under another AZPDES permit.

2.2.1.2.8 Employee Training

The permittee shall train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of the site's Stormwater Pollution Prevention Team. Training must cover both the specific control measures and the monitoring, inspection, planning, reporting, and documentation requirements

described in this permit. For larger sites with multiple co-permittees, employee training is required for those industrial areas and stormwater controls measures for which the co-permittee is responsible for maintaining. Training shall be conducted at least annually.

The permittee must ensure the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements, for the following:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of control measures (including pollution prevention measures);
- Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges;
- Personnel who are responsible for taking and documenting corrective actions as required in Part 3;
- Personnel who are responsible for conducting and documenting monitoring and inspections as required in Parts 4 and 6.

Personnel must be trained in the following areas, if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- An overview of what is in the SWPPP;
- Spill response procedures, good housekeeping, maintenance requirements, and material management practices;
- The location of all controls on the site required by this permit, and how they are to be maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

2.2.1.2.9 Non-Stormwater Discharges

The permittee shall evaluate the presence of non-stormwater discharges at the site. Any non-stormwater discharges from the site not specifically authorized in Part 1.1.3 or covered by another AZPDES permit, shall be eliminated.

The discharge of vehicle and equipment washwater, including tank cleaning operations, is not authorized by this permit. These wastewaters must be covered under a separate AZPDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or disposed of otherwise in accordance with applicable law.

2.2.1.2.10 Dust Generation and Vehicle Tracking of Industrial Materials

The permittee shall minimize generation of dust and off-site tracking of raw, final, or waste materials in order to minimize pollutant discharges.

2.2.2 Numeric Effluent Limitations Based on Effluent Limitation Guidelines

Table 2-2 below identifies specific regulated activities with effluent limitation guidelines and the locations of effluent limitation guidelines in this permit. Discharges from such activities must meet the specified effluent limitation guidelines. Compliance with these effluent limits is to be determined based on discharges from these regulated activities independent of commingling with any other discharges allowed under this permit.

Table 2-2 Applicable Effluent Limitations Guidelines		
Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Mine dewatering discharges at crushed stone, construction sand and gravel, or industrial sand mining facilities	Part 436, Subparts B, C, or D	See Part 8.J.9

3.0 Corrective Actions

3.1 Corrective Action Triggers

3.1.1 Conditions Requiring Corrective Action

The following conditions require corrective action:

- An unauthorized discharge (e.g., non-stormwater discharge not authorized by this or another AZPDES permit to a Water of the U.S or to a regulated MS4.);
- The permittee becomes aware, or ADEQ determines, that a discharge from the site causes or contributes to an exceedance of applicable surface water quality standard(s) (Part 2.1.1);
- The permittee becomes aware, or ADEQ determines, that a discharge from the site to water listed as not-attaining exceeds an adopted wasteload allocation (WLA) for the pollutant(s) causing the impairment (Part 2.1.1.1);
- The permittee becomes aware, or ADEQ determines, that a discharge from the site to an Outstanding Arizona Water is degrading the existing water quality (Part 2.1.1.2); or
- A discharge from the site violates a numeric effluent limitation guideline in Table 2.2 and in Part 8 sector- specific requirements.

The permittee shall review the selection, design, installation, and implementation of a site's control measures and revise as necessary, to ensure the condition is appropriately addressed.

3.1.2 Substantially Identical Outfalls

If an outfall that represents other substantially identical outfalls requires corrective action, all related substantially identical outfalls shall be assessed for corrective action

3.2 Corrective Action Deadlines, Documentation, and Reporting

Within 30 days of a discovery of any condition in Part 3.1.1, the permittee shall submit a Corrective Action Report Form provided by the Department, either in paper or electronic form (if available) that includes the following information:

1. Within 72 hours of discovery, the permittee shall document the discovery of that condition, including the following:
 - a. Identification of the condition triggering the need for corrective action review;
 - b. Description of the problem/incident including material type and amount;
 - c. Date/time the problem was identified;
 - d. The location of the incident;
 - e. The cause of the spill, leak, other release or sampling exceedance, if applicable;
 - f. The outfall name(s)/ locations effected; and
 - g. The affected receiving water and whether the receiving water is a special water.
2. Within 14 calendar days of discovery (or before the next measurable storm event if possible, whichever is sooner) the permittee shall complete and document the following:
 - a. A summary of corrective action taken or to be taken, including modifications to control measures, in order to minimize or prevent the reoccurrence of a discharge of a pollutant(s) or prevent further exceedance(s);
 - b. Identify and describe SWPPP modification(s) that are required as a result of this discovery and/or corrective actions;
 - c. Provide date corrective action initiated or will be initiated;
 - d. Provide date corrective action completed or expected to be completed;
 - e. Summarize the results of any analytical monitoring results that prompted corrective action, including any subsequent sampling results, if available;
 - f. Describe any accelerated monitoring or other permit contingency actions that will be

- required;
- f. If corrective actions cannot be implemented within the specified timeframe(s), the permittee shall document the reasons for the delay, provide an implementation schedule for completing the necessary changes, including any back-up practices in place to ensure compliance with applicable effluent limitations, should a runoff event occur while a control measure is off-line;
 - g. If no corrective action is needed, describe the basis for that determination;
 - h. Provide the date and the outcome of the last four (4) routine site inspections; and
 - i. A statement, signed and certified in accordance with Appendix B, Subsection 9.

Any corrective actions documentation taken pursuant to this section, shall be kept with the site's SWPPP.

4.0 Inspections

Additional sector-specific inspection requirements may be required pursuant to Part 8 of this permit. If a conflict exists between the two, the requirements of Part 8 shall prevail.

4.1 Routine Site Inspections

During normal site operating hours, the permittee must conduct routine inspections and examine areas of the site covered by this permit, include the following:

- Areas where industrial materials or activities are exposed to stormwater with the potential to discharge;
- Areas that are identified as potential pollutant sources in the SWPPP;
- All stormwater control measures used to comply with the effluent limits contained in this permit;
- Locations where spills and leaks from industrial equipment, drums, tanks and other containers that can occur or has occurred in the past three years;
- Areas where tracking or blowing of sediment, trash, raw, final or waste materials is or has occurred from areas of no exposure to exposed areas, including locations where vehicles enter or exit the site;
- Discharge points.

Routine inspections shall be conducted at least once each calendar quarter beginning with the first full calendar quarter after the site becomes covered under this permit (see Part 1.3.1(2) and Table1-2). The permittee shall specify the inspection schedules in the SWPPP.

A qualified person or persons (see definition in Appendix A) shall conduct routine site inspections. A member of the Stormwater Pollution Prevention Team shall conduct or participate in the routine site inspection.

The permittee shall conduct at least one of the routine site inspections each calendar year while a stormwater event or discharge is occurring at one or more outfalls when practicable, to determine that the control measures are functioning correctly. If there is no measurable storm event(s) or discharge during a calendar year, the permittee shall document the inability to perform a routine inspection when a discharge is occurring. In this case, the permittee must still complete four routine quarterly inspections per calendar year.

4.1.1 Routine Site Inspection Documentation

The permittee shall document the findings of each routine site inspection performed and maintain this documentation with the SWPPP. Inspection findings do not need to be submitted to ADEQ, unless specifically requested. At a minimum, the documentation for each routine site inspection must include:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information;
- All observations relating to the implementation of control measures at the site, including:
 - A description of any discharges occurring at the time of the inspection;
 - Any previously unidentified discharges from and / or pollutants at the site;
 - Any evidence of, or the potential for, previously unidentified pollutants entering the drainage system;

- Observations regarding the physical condition of and around all outfalls, including any flow dissipation devices, and evidence of pollutants in discharges and/or to the receiving water;
- Any control measures needing maintenance or repairs;
- Any failed control measures that need replacement;
- Any additional control measures needed to comply with the permit requirements;
- Any required revisions to the SWPPP resulting from the inspection;
- Any incidents of noncompliance; and
- Signature of person conducting the inspection.

Any corrective action required as a result of a routine site inspection must be performed consistent with Part 3 of this permit.

4.1.2 Exceptions for Inspection Requirements for Inactive and Unstaffed Mining Sites

Each calendar year, a permit holder of an inactive and unstaffed mining site shall conduct one routine site inspection in accordance with the requirements of Part 4.1. The permittee shall also inspect the site whenever there is a reasonable expectation that severe weather or other events may have damaged control measures or increased discharges. The permittee is waived from general analytical monitoring, quarterly routine site inspections and quarterly visual assessments inspection requirements in accordance with Part 1.6.

Where inspections are not practical at inactive and unstaffed mine sites, the permittee shall submit an Inactive and Unstaffed Site Certification Form within one year of obtaining permit coverage. The form shall include an explanation why inspections are impracticable at the mine site. Inactive and unstaffed mine facilities where it has been determined that annual inspections are impracticable, shall be inspected once every three years (tri-annual). Tri-annual inspections must be conducted in accordance with Section 4.0, and signed by a Registered Professional Engineer in the state of Arizona, certifying that the site is in compliance with the permit, or alternative requirements using the Inactive and Unstaffed Site Certification Form. The permittee shall also inspect the site whenever there is a reasonable expectation that severe weather or other events may have damaged control measures or increased discharges.

4.2 Visual Assessment of Stormwater Discharges

The permittee shall, during normal site operating hours, perform two visual assessments during the summer wet season and two visual assessments during the winter wet season when the site is discharging.

Wet seasons, for the purposes of visual assessments, are defined as follows:

- Summer wet season: June 1 – October 31
- Winter wet season: November 1 – May 31

The term 'wet season' applies statewide and includes areas of the state where freezing conditions exist that prevent runoff from occurring for extended periods. In areas where freezing conditions exist, the four visual assessments may be distributed during seasons when precipitation runoff occurs.

Visual assessment requirements in this permit begin immediately after authorization to discharge is received by the permittee unless authorization is received 90 calendar days or more after a wet season has begun, in which case visual assessments shall commence with the start of the next wet season.

4.2.1 Visual Assessment Procedures

Twice per wet season for the permit term, the permittee shall collect a stormwater sample from each outfall (except as noted in Part 4.2.3) and conduct a visual assessment of that sample. The visual assessment samples are not required to be collected consistent with 40 CFR Part 136 procedures, but must be collected in such a manner that the samples are representative of the stormwater discharge. The visual assessment shall be made:

- Of a sample in a clean, colorless glass, or plastic container, and examined in a well-lit area;
- On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes and the permittee shall document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples shall be taken during a period with a measurable discharge from the site; and
- On discharges that occur at least 72 hours (3 calendar days) from a previous discharge.

The permittee shall visually inspect the sample for the following water quality characteristics:

- Color;
- Odor;
- Clarity;
- Floating solids;
- Settled solids;
- Suspended solids;
- Foam;
- Oil sheen; and
- Other obvious indicators of stormwater pollution.

4.2.2 Visual Assessment Documentation

The permittee shall document the results of the visual assessments and maintain this documentation with the SWPPP. The visual assessment findings need not be submitted to ADEQ, unless specifically requested by the Department. At a minimum, the documentation of the visual assessment shall include, but not be limited to:

- Sample location(s);
- Sample collection date and time, and visual assessment date and time for each sample;
- Personnel collecting the sample and performing visual assessment, and their signatures;
- Nature of the discharge (i.e., runoff or snowmelt);
- Results of observations of the stormwater discharge;
- Probable sources of any observed stormwater contamination; and
- If applicable, why it was not possible to take samples within the first 30 minutes; and
- Signature of person conducting the visual assessments.

4.2.3 Exceptions to Visual Assessments of Stormwater Discharges

4.2.3.1 Absence of Discharge: If no storm event results in a discharge from the site or outfall(s) during a wet season, the permittee is excused from visual assessment for the site or outfall(s) for that season provided the permittee documents the absence of discharge in visual assessment documentation record and retains that record with the SWPPP.

4.2.3.2 Adverse Weather Conditions: Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling unsafe. When adverse conditions prevent the collection of either visual assessment sample in a given wet season, the permittee shall document the adverse weather conditions in the monitoring record and retain those records with the SWPPP.

4.2.3.3 Substantially Identical Outfalls: If the site has two or more outfalls that discharge substantially identical pollutants, the permittee may conduct visual assessments of the discharge at just one of the identical outfalls. If possible, visual assessments at substantially identical outfalls shall be performed on a rotating basis throughout the period of permit coverage. When invoking the substantially identical outfall provision, the permittee shall identify the identical outfalls in the monitoring record and retain those records with the SWPPP.

If a visual assessment collected at a substantially identical outfall demonstrates that control measures are not functioning as intended, the permittee shall assess and modify the control measures as appropriate at each substantially identical outfall represented by the monitored outfall.

4.2.3.4 Inactive and Unstaffed Sites: Permittees at inactive and unstaffed mine sites do not have to complete visual assessments.

5.0 Stormwater Pollution Prevention Plan (SWPPP)

A Stormwater Pollution Prevention Plan (SWPPP) that meets the requirements of parts 5 and 8 of this permit shall be prepared by qualified personnel prior to submitting a NOI.

5.1 Contents of the Site's SWPPP

5.1.1 Contents of the SWPPP

The SWPPP, at a minimum, shall contain and identify the following requirements:

- Stormwater Pollution Prevention Team by name, title, or role;
- A site description, including a discussion of industrial activities that occur at the site;
- A generalized location map (e.g. a USGS quadrangle map) with all surface water(s) receiving stormwater discharges from the facility identified;
- A detailed site map (see Part 5.1.2);
- Summary of pollutant sources;
- List of significant spills and leaks of pollutants that occurred in the past three years;
- Document the occurrence of unauthorized non-stormwater discharges;
- A description of control measures that will be used to ensure compliance with the requirements in Part 2.1 and Part 2.2.1;
- The schedule, practices and procedures for the following: good housekeeping, control measure maintenance / repair measures, spill prevention/ response, erosion/ sediment controls, and type and frequency of employee training;
- The schedule and documentation procedures utilized for site inspections and visual assessment monitoring;
- A description of stormwater monitoring and sampling procedures, including outfall identification and describe any exemptions to monitoring (such as inactive/ unstaffed site and/or rationale for any substantially identical outfall determinations);
- A Sampling and Analysis Plan (see Part 6.1.5), if required, including previous sampling results from the previous permit term; and
- Signature requirements (see Part 5.2)

If the SWPPP refers to procedures in other site documents, such as other environmental permits, a Spill Prevention Control and Countermeasure (SPCC) Plan or an Environmental Management System (EMS) and copies of the relevant portions of those documents must be kept with the SWPPP if they are incorporated to satisfy SWPPP requirements.

5.1.2 Site Map Requirements

Provide a legible site map (or maps) completed to scale, that identifies the following:

- Boundaries of the property;
- Designation of area(s) associated with industrial activities;
- Identification of adjacent properties;
- Directions of stormwater flow for areas of the site that generate stormwater discharges with a reasonable potential to contain pollutants (e.g. topographic map or arrows as necessary to depict stormwater flow direction);
- Locations of all stormwater conveyances including ditches, pipes, and swales;
- Locations of major structural stormwater control measures;
- Locations of surface waters receiving the site's discharges and any special waters clearly labeled within 2.5 miles of the site (can be identified on a generalized site map);
- Locations where the site's stormwater discharges to a regulated MS4 (where applicable);
- Locations where significant spills or leaks have occurred in the past three years;
- Locations of outfalls with a unique identification code for each feature;
- An approximate outline of the areas draining to each outfall;

- Identification of which outfalls are considered sampling points;
- Identification of which outfalls are being treated as substantially identical outfalls;
- Provide location of outfalls that are inactive or no longer used as outfalls, if practicable;
- Locations of all outfalls that include allowable non-stormwater discharges under Part 1.1.3;
- Location of on-site drywell(s) and their registration number(s);
- Sources of run-on to the site from adjacent property that may contain pollutants;
- Locations of the following activities and features that are exposed to stormwater with the potential to discharge pollutants, including but not limited to:
 - fueling stations;
 - vehicle and equipment maintenance and/or cleaning areas;
 - loading/unloading areas; locations used for the treatment, storage, or disposal of wastes;
 - liquid storage tanks;
 - processing/storage areas;
 - transfer areas for substances in bulk;
 - machinery; and
 - access roads/rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the site

5.2 Signature Requirements

The permittee shall sign and date the SWPPP in accordance with Appendix B, Subsection 9. If the SWPPP covers more than one permitted site, each permittee must certify the SWPPP in accordance with Appendix B, Subsection 9.

5.3 Required SWPPP Modifications

The permittee shall keep an up to date SWPPP. The permittee shall modify the SWPPP whenever necessary to address triggering conditions for corrective action in Part 3.1. Changes to the SWPPP to reflect corrective actions shall be made in accordance with the corrective action deadlines in Parts 3.2.

In addition, the permittee shall modify the SWPPP to reflect new or modified control measures, including measures implemented at active mining operations as mining activities expand into undisturbed areas (Part 8.G.5.2)

5.4 SWPPP Availability

The permittee shall retain a copy of the current SWPPP at the site, and it shall be made immediately available to ADEQ, EPA, or another Federal, State, or local agency having stormwater program authority, or to the operator of a regulated MS4 receiving discharges from the site, at the time of an onsite inspection or upon request.

Inactive and Unstaffed Sites: Permittees with facilities that meet the requirements for inactive and unstaffed are not required to maintain the SWPPP on-site. However, the SWPPP must be locally available (i.e., in Arizona) and must be on-site when conducting the inspections required by Part 4. For the purpose of a regulatory inspection, the SWPPP shall be made available to ADEQ, EPA, or other Federal, State, or local authority having stormwater program authority, within 48 hours of request.

5.5 SWPPP Submittal

As part of the permitting process, or upon written notification from ADEQ, the permittee shall submit a complete and up-to-date copy of the SWPPP to the Department in response to the following criteria:

- The site is located within 2.5 miles of a special water (Note: during the SWPPP review ADEQ will evaluate relevant site conditions such as location (upgradient/downgradient) of special waters, the potential for pollutant to be present in the discharge, and whether analytical monitoring will be required);
- ADEQ has determined stormwater discharges are (or have the potential to) causing or contributing to the exceedance of a surface water quality standard in the receiving water;
- As the result of an inspection conducted by ADEQ or U.S. EPA;
- To demonstrate compliance with permit conditions;
- A complaint about the site or discharge activity was submitted to ADEQ; and
- The SWPPP has been requested as part of a public records request.

Additionally, the permittee may voluntarily submit a copy of the SWPPP at any time for ADEQ's review.

All SWPPP's submitted to ADEQ shall be done so electronically using the online myDEQ portal.

Anytime a SWPPP is submitted to ADEQ for review, the applicable review fee must be included (A.A.C. R18-14-109).

Permittees who submitted their SWPPP under the previous permit are not required to automatically re-submit their SWPPP as part of the NOI process to obtain coverage under this permit.

5.6 Additional SWPPP Documentation Requirements

The permittee shall keep the following maintenance, corrective action, inspections, visual assessment results, monitoring, employee training and certification records complete and up-to-date with the site's SWPPP. The additional SWPPP documentation requirements are intended to demonstrate the site's compliance with conditions of this permit:

- A copy of the electronic NOI Summary and NOI Authorization Certificate, including any other correspondence from the Department that is related to this permit coverage;
- A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable). Note: a copy of the permit does not need to be included if permittee has to submit a SWPPP to ADEQ for review;
- Documentation of maintenance and repairs of structural control measures, including the dates of regular maintenance, date of discovery of control measures in need of repair/replacement, the date(s) that the structural control measure(s) returned to full function, and the justification for any extended repair schedules (see Part 2.2.1.2.3). If records of maintenance is extensive, an electronic record shall be made readily available upon request;
- Corrective action documentation (see Part 3.2);
- All inspection reports: the Routine Site Inspection Reports (see Part 4.1), and the Visual Assessment Reports (see Part 4.2);
- Description of any deviations from the regular schedule for visual assessments and/or analytical monitoring, and the reason for the deviations (e.g., adverse weather);
- Monitoring results (can be a copy of the electronic DMR), including any exemptions to monitoring;
- Records of employee training, including date training received (see Part 2.2.1.2.8). If records of employee training is extensive, an electronic record shall be made readily available upon request;
- Documentation to support a permittee's determination that an analytical monitoring result was due to natural background levels; is attributed to run-on from an adjacent site; or a determination was made that no further pollutant reduction were technologically and economically practicable and achievable in light of industry practice; and or the discharge is

- not causing or contributing to a surface water quality standard exceedance based on in-stream monitoring; and
- Maintain a statement in the SWPPP indicating that the site is inactive and unstaffed, in accordance with Part 1.6. The statement must be signed and certified in accordance with Appendix B, Subsection 9.

Facilities may retain copies of records and documentation required by this permit electronically or at locations other than with the SWPPP, however, the records must be easily accessible and the SWPPP shall clearly identify where the information is kept.

6.0 Analytical Monitoring Program.

In addition to visual assessments required in Part 4.2, the permittee shall analyze stormwater samples, in accordance with Part 6 and any sector-specific requirements in Part 8.

6.1 Analytical Monitoring Procedures

6.1.1 Analytical Monitoring Types

This permit specifies five separate types of analytical monitoring. Depending on the industrial activity, discharge activity, site location, type of receiving water, or potential to cause or contribute to an exceedance of a surface water quality standard in the receiving water, any or all of the monitoring requirements may be applicable:

- General analytical;
- Effluent Limitation Guidelines (ELGs);
- Impaired Water (includes not-attaining);
- Outstanding Arizona Water; and/or
- Other monitoring prescribed by ADEQ.

If analytical monitoring of discharges from the site is required, a summary of the monitoring requirements consistent with this permit (frequency, analytical parameters, etc.) will be included with the authorization certificate issued through myDEQ, or in a separate written notification from ADEQ.

6.1.2 When to Collect Samples

Monitoring requirements in this permit begin within 90 calendar days of receiving the authorization to discharge. Unless otherwise specified by ADEQ, analytical monitoring shall be conducted one time per wet season (two times per year) for the duration of permit coverage for all types of monitoring (see Part 6.1.1) except Effluent Limitation Guidelines (ELGs) monitoring. ELG monitoring shall be conducted once per year.

Sampling must occur when there is sufficient stormwater discharge to allow for the collection of a representative sample using sampling methods described in Part 6.1.3. Wet seasons are as follows:

Winter Wet Season:	November 1 – May 31
Summer Wet Season:	June 1 – October 31

The term 'wet season' includes areas of the state where freezing conditions exist that prevent runoff from occurring for extended periods. In areas where freezing conditions exist, the required monitoring and sample collection may be distributed during seasons when precipitation runoff, either as melting snow or rain mixed with melting snow, occurs.

Monitoring must be performed on a storm event that results in a discharge from the site that follows the preceding measurable storm event by at least 72 hours (3 calendar days), or the permittee can document that less than a 72-hour interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at the site.

6.1.3 How to Collect Samples

Samples collected for the purpose of this permit shall be either discrete (grab) samples or flow-weighted composite samples. Samples may be collected using an automatic

sampler, manually by qualified personnel, a continuous sample (for flow-weighted composite samples only), or by using a passive sampler (if appropriate).

Whenever possible, grab samples must be collected within the first 30 minutes of a stormwater discharge. If it is not possible to collect the sample within the first 30 minutes of a stormwater discharge, the sample must be collected as soon as practicable. Documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes.

Flow-weighted composite samples for a stormwater discharge may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots (sample portions) taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. For flow-weighted samples, only one analysis of the composite of aliquots is required. Flow-weighted sampling protocol is adapted from 40 CFR 122.21 (individual permit application requirements for industrial stormwater permits).

Note – analysis of the following parameters must be from discrete (not composite) samples: pH, temperature, cyanide, total phenols, residual chlorine, oil and grease and fecal coliform.

The NOI certificate will specify for each applicable action level which fraction (total or dissolved) is required. For metals analysis where the action level is in the dissolved fraction, the permittee has the option to have the sample analyzed for total or dissolved for routine analytical monitoring requirements.

6.1.4 Where to Sample

Samples shall be collected from each outfall where stormwater discharges from the permitted site occur. This may be a discrete pipe, ditch, channel, overland (sheet) flow, or other location(s) so long as the stormwater is representative of the discharge of industrial activities conducted at the site.

In the event there are two or more outfalls that are composed of the same, or substantially similar, stormwater discharge characteristics (substantially identical outfalls), the number of sampling locations can be reduced. The permittee may monitor the discharge at one outfall and report the sampling results for the other substantially identical outfalls. Substantially identical outfalls are based on:

- Similarities of general industrial activities and control measures;
- Exposed material that may significantly contribute pollutants to stormwater; and
- Similar runoff coefficient of their drainage area.

The SWPPP must identify each outfall authorized by this permit and describe the rationale for the substantially identical outfall determination. The substantially identical outfall provision cannot be applied to outfalls with numeric effluent limit guidelines or outfalls that discharge to Outstanding Arizona Waters.

If discharges authorized by this permit commingle with discharges not authorized under this permit, any required sampling of the authorized discharges must be performed at a point before they mix with other waste streams, to the extent practicable.

6.1.5 Sampling and Analysis Plan (SAP)

Any permittee subject to monitoring shall develop a written SAP covering all analytical monitoring

required by this permit. The SAP shall be included with the site's SWPPP. The SAP shall include the following:

- Sample Collection, Preservation, Tracking, and Handling Information;
- Calibration and Maintenance of Monitoring Equipment; and
- Analytical Methods and Laboratories.

Other than parameters required to be sampled at the time of sample collection (e.g., field parameters), shall be analyzed by a laboratory that is licensed by the Arizona Department of Health Services (ADHS) Office of Laboratory Licensure and Certification. The samples shall be analyzed using analytical methods with a limit of quantitation (LOQ) that is at or below the prescribed permit limits. All laboratory analyses shall be conducted according to test procedures specified in 40 CFR 136, unless other test procedures have been specified in this general permit.

6.2 Required Monitoring

When more than one type of monitoring for the same parameter at the same outfall applies, a single sample may be used to satisfy both monitoring requirements. All required monitoring shall be conducted in accordance with the procedures described in Appendix B, Subsection 11.D.

6.2.1 General Analytical Monitoring

The permittee shall monitor stormwater discharges for parameters specified in Part 8 for the primary industrial activity, and any co-located industrial activities authorized under this permit.

6.2.2 Effluent Limitation Guidelines Monitoring

Effluent Limitation Guidelines (ELGs) are national limits established in federal rule (see 40 CFR 425 et seq.). Industrial activities that are subject to ELG monitoring are specified in Part 8 of this permit. Exceedance of an ELG constitutes a violation of this permit, requires accelerated monitoring (Part 6.3) and corrective action pursuant to permit Part 3.0.

The substantially identical outfall and the inactive and unstaffed monitoring exemptions does not apply to ELG monitoring.

6.2.3 Impaired and Not-Attaining Waters Monitoring

An industrial stormwater discharge from the site to water listed as impaired and/ or not-attaining (or to an upstream tributary within 2.5 miles) analytical monitoring may be required for the pollutant of concern (parameter(s) for which the water body is impaired), under this permit to ensure protection of the receiving water and attainment of designated use(s). If monitoring is required, the type, frequency, and analytical parameters will be included in the final permit authorization certificate.

If the waterbody is impaired for suspended solids, turbidity or sediment/sedimentation and the discharge occurs for more than 48 hours after the storm event, the permittee shall monitor for SSC. If the pollutant for which the waterbody is impaired is expressed in the form of an indicator or surrogate pollutant, the permittee shall monitor for that indicator or surrogate pollutant. No monitoring is required when a waterbody's biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is specified as causing the impairment, or when a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or temperature.

The discharge of a pollutant above an applicable an adopted a Waste Load Allocation (WLA) or Total Daily Maximum Load (TMDL) for a not-attaining water, requires corrective

action pursuant to permit Part 3.0.

6.2.4 Outstanding Arizona Water Monitoring

In the event any industrial stormwater discharged from the site is within 2.5 miles (upstream tributary) of a water that is listed as an Outstanding Arizona Water, analytical monitoring will be required under this permit to ensure protection of the receiving water and attainment of designated use(s).

The parameters to be monitored will be determined by ADEQ and will be dependent on the site's industrial activities and location relative to the OAW.

The substantially identical outfall and the inactive and unstaffed monitoring exemptions do not apply to OAW monitoring.

If the discharge of a pollutant has been determined by ADEQ to be degrading exiting surface water quality in an OAW, the permittee shall conduct corrective action pursuant to permit Part 3.0.

6.2.5 Additional Monitoring Required by ADEQ

ADEQ may notify the permittee of additional discharge monitoring required to ensure protection of receiving water quality in cases where there is evidence that a discharge may be causing or contributing to exceedances of a surface water quality standard in the receiving water. Any such notice will be in writing and will provide an explanation of the reasons for the monitoring, locations, and parameters to be monitored, frequency and reporting requirements.

6.3 Accelerated Monitoring

In the event a sample result exceeds an effluent limitation guideline, the permittee shall implement accelerated monitoring.

The permittee shall sample each subsequent storm event that results in an industrial stormwater discharge.

Accelerated monitoring shall continue until the results for the parameter is below the respective limit for two consecutive sampling events.

Analytical results for accelerated monitoring shall be entered electronically using myDEQ into the discharge monitoring report (e-DMR) within 30 days of receiving the laboratory analytical results for reach sampling event (see permit Part 7.1).

6.4 Exemptions or Exceptions to Analytical Monitoring

6.4.1 Absence of Discharge

If no storm event results in a discharge from the site or outfall(s) during a wet season, the permittee is excused from analytical monitoring for the site or outfall(s) for that season. An absence of discharge does not exempt the permittee from the requirement to file a discharge monitoring report (e-DMR) in accordance with the site's reporting schedule.

6.4.2 Adverse Weather Conditions

Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, electrical storms, or situations that otherwise make

sampling unsafe. When adverse conditions prevent the collection of an analytical sample in a given wet season, the permittee shall document those conditions in the SWPPP and resume analytical monitoring in the subsequent wet season. Adverse conditions do not exempt the permittee from the requirement to file a discharge monitoring report (e-DMR) in accordance with the site's reporting schedule.

6.4.3 Substantially Identical Outfalls

The permittee may invoke the substantially identical outfalls provision for routine analytical and impaired/ not-attaining waters monitoring. The substantially identical outfall provision cannot be applied to outfalls with numeric effluent limitation guidelines or outfalls that discharge to OAWs.

The SWPPP must identify each outfall authorized by this permit and describe the rationale for the substantially identical outfall determination. Permittees invoking the substantially identical outfall provision must file a discharge monitoring report (e-DMR) in accordance with the site's reporting schedule.

6.4.4 Inactive and Unstaffed Sites

The requirement for general analytical monitoring does not apply at a site that is inactive and unstaffed. The requirement for impaired waters and / or OAW monitoring at a site that is inactive and unstaffed is reduced to once per year, if the requirements of Part 1.6 are met.

If a permitted site will be inactive and unstaffed, the permittee can suspend analytical monitoring. To be eligible for the suspended monitoring condition, the permittee shall within 30 days of becoming inactive and unstaffed, update their NOI in myDEQ indicating the approximate time period for which the site will be inactive and unstaffed. The site status cannot retroactively be made inactive and unstaffed and, as such, all monitoring conditions apply until such time as ADEQ is notified of the inactive and unstaffed status (by modifying the NOI in myDEQ). *Note: Within 30 days of becoming inactive and unstaffed or reverting back to an active and staffed site, the permittee must modify the NOI to update the status of the site.* When a site becomes active and staffed, the permittee must resume any monitoring requirements specified in this permit.

Sites that are subject to accelerated (compliance) monitoring (Part 6.3) are not eligible to suspend their monitoring program due to inactive and unstaffed designation.

Invoking the inactive and unstaffed monitoring provision does not exempt the permittee from the requirement to file a discharge monitoring report (e-DMR) in accordance with the site's reporting schedule.

6.4.5 Exception for Stormwater Discharges to Ephemeral Waters.

Facilities that discharge to ephemeral surface waters are not required to monitor for Total Suspended Solids (TSS) and turbidity as part of the general analytical monitoring requirements specified in Part 8.

6.5 Submittal of Monitoring Data

All permittees subject to analytical monitoring, or those that invoked an exemption /exceptions to monitoring, shall report to the Department on the electronic Discharge Monitoring Report (e-DMR) using myDEQ. The permittee shall retain records of all stormwater monitoring information, including exemptions to monitoring with the SWPPP.

The e-DMR shall be submitted within 30 days after receiving laboratory results. In the event no samples are collected during a wet season, the e-DMR indicating “no data” using the appropriate No Discharge Information (NODI) code(s) shall be submitted no later than:

Winter Wet Season: June 30
Summer Wet Season: November 30

In the event a permittee elects to collect a flow-weighted sample in response to a stormwater discharge event, the following information must be included on the e-DMR:

- Identify it is a composite sample
- The number of aliquots that comprise the composite sample
- Time between each aliquot
- Flow rate
- Duration of discharge event

7.0 Reporting and Recordkeeping

7.1 Electronic Discharge Monitoring Report (e-DMR)

7.1.1 Who Must Submit an e-DMR

Permittees who are subject to general analytical monitoring, numeric effluent limitation guideline, impaired waters (with or without a TMDL), OAW and /or ADEQ requested monitoring data, shall prepare and submit an electronic Discharge Monitoring Report (e-DMR) that is available using myDEQ. If there was “no discharge” for the monitoring period, the permittee must still submit an e-DMR indicating there was no discharge of stormwater for the reporting period using the No Data DMR or No Data Code Indicated (NODI) code of *No Discharge*. Additionally, if the site is inactive/ unstaffed, or other sampling exemptions apply, an e-DMR is still required to be submitted, however, the e-DMR will include no data or a NODI code to explain why sampling was not completed for that reporting period.

7.1.2 How to Submit an e-DMR

The permittee shall submit the e-DMR using myDEQ electronic reporting system available through the ADEQ website.

7.1.3 When to Submit the e-DMR

The permittee shall complete and submit e-DMR within 30 days of receiving the laboratory analytical data.

If there is no sampling data during the reporting period because there was no discharge or another exemption to sampling applied, such as an inactive and unstaffed site, the e-DMR shall be submitted no later than the following:

Winter Wet Season: June 30
 Summer Wet Season: November 30

7.2 Other Reporting Requirements

The permittee is subject to the reporting requirements stipulated in Part 7, in addition to the standard permit reporting provisions of Appendix B, Subsection 12.

The permittee must submit the following reports to the appropriate ADEQ Office listed in Part 7.5, as applicable.

- 7.2.1 24-hour Reporting** (see Appendix B, Subsection 12.e). The permittee must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time the permittee becomes aware of the circumstances;
- 7.2.2 5-day follow-up Reporting** to the 24-hour reporting (see Appendix B, Subsection 12.e.(ii)). A written submission must also be provided within five days of the time the permittee becomes aware of the circumstances;
- 7.2.3 Reportable Quantity Spills Reporting** (verbal report only). The permittee must provide notification, as required under Part 2.2.1.2.4, as soon as the permittee has knowledge of a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity.
- 7.2.4 Planned Changes Report** (see Appendix B, Subsection 12.a). The permittee must give notice to ADEQ promptly, no fewer than 30 days prior to making any planned physical alterations or additions to the permitted site that qualify the site as a new source or that

could significantly change the nature or significantly increase the quantity of pollutants discharged.

- 7.2.5 Anticipated Noncompliance Report** (see Appendix B, Subsection 12.d). The permittee must give advance notice to ADEQ of any planned changes in the permitted site or activity which the permittee anticipates will result in noncompliance with permit requirements;
- 7.2.6 Transfer of Ownership and/or Operation Report** – (see Table 1-2);
- 7.2.7 Other Noncompliance Report** (see Appendix B, Subsection 12.f). The permittee shall report all instances of noncompliance annually using the Non-Compliance Report Form provided by the Department; and
- 7.2.8 Missing or Incorrect Information Report** (see Appendix B, Subsection 12.g). The permittee must promptly submit facts or information once you become aware of the following: you failed to submit relevant facts in the NOI, or that incorrect information was submitted in the NOI or in any report.

If the discharge enters a municipal separate storm sewer system, the permittee shall also submit reports to the MS4 operator.

7.3 Recordkeeping

The permittee shall retain copies of the SWPPP (including any modifications made to control measures during the term of this permit), additional documentation requirements pursuant to Part 5.6 (including documentation related to corrective actions taken pursuant to Part 3), all reports and certifications required by this permit, monitoring data, and records of all data used to complete the NOI to be covered by this permit, for a period of at least three (3) years from the date that the site's coverage under this permit expires or is terminated.

7.4 Addresses for Reports

All documentation required by this permit shall be submitted electronically through myDEQ, if available. This includes Notices of Intent (NOI), Notices of Termination (NOT), No Exposure Certifications (NEC) and Discharge Monitoring Report (DMR) forms shall be submitted electronically. If electronic reporting is not available, paper documents shall be submitted to the following address until such time as electronic submissions become available:

Arizona Department of Environmental Quality
Water Quality Division - MSGP
1110 W. Washington Street, Mail Code 5415 A-1
Phoenix, AZ 85007

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart G – Sector G – Metal Mining

The permittee must comply with the requirements applicable to the site’s industrial sector(s) in this Part, in addition to the requirements applicable to all facilities in Parts 1 through 7 and the appendices to the permit.

Primary industrial activity and any co-located industrial activities authorized under this permit, as defined in Appendix A. The sector-specific requirements apply to those areas of the site where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit. In some cases, these sector-specific requirements modify more general requirements set forth in Parts 1-7 of this permit (e.g., Part 8.G.9. below).

8.G.1 Covered Stormwater Discharges

The requirements in Subpart G apply to stormwater discharges associated with industrial activity from Metal Mining facilities, including mines abandoned on Federal lands, as identified by the SIC Codes specified under Sector G in Table 1-1 of this permit. Coverage is required only for mining operations that discharge stormwater contaminated by contact with, or that has come into contact with, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation.

8.G.1.1 *Covered Discharges from Active Facilities.* Only the stormwater discharges from the areas described in Table 8.G.1.1 and the allowable non-stormwater discharges identified in Part 1.1.3 are covered:

TABLE 8.G.1.1—APPLICABILITY OF THE AZPDES MULTI-SECTOR GENERAL PERMIT TO STORMWATER RUNOFF FROM ACTIVE ORE (METAL) MINING AND DRESSING SITES

Discharge/source of discharge	AZPDES General Permit Applicability
Piles	
Waste rock/overburden Topsoil piles	Discharge under GP must be composed entirely of stormwater and not combined with mine drainage. See Note below.
Roads constructed of waste rock or spent ore	
Onsite haul roads and haul/access roads used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the site.	Discharge under the GP must be composed entirely of stormwater and not combined with mine drainage. See Note below.
Roads not constructed of waste rock or spent ore	
Onsite haul roads and haul/access roads used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the site.	Discharge acceptable under GP except if “mine drainage” is used for dust control.
Milling/concentrating	
Runoff from tailings dams/dikes when constructed of waste rock/tailings.....	Discharges must be composed entirely of stormwater and not combined with mine drainage; not applicable if process fluids are present. See Note below.
Runoff from tailings dams/dikes when not constructed of waste rock/tailings.....	Discharge acceptable under GP except if process fluids are present.
Concentration building.....	Discharge acceptable under GP if discharge is stormwater only and there is no contact with concentrate piles.

Discharge/source of discharge	AZPDES General Permit Applicability
Mill site.....	Discharge acceptable under GP if discharge is stormwater only and there is no contact with concentrate piles.
Ancillary areas	
Office/administrative building and housing.....	Discharge acceptable under GP if mixed with stormwater from the industrial area. (Note: coverage is unnecessary if drainage from these areas is not mixed with stormwater from industrial areas.)
Chemical storage area & Docking site.....	Discharge under GP must be composed entirely of stormwater and not combined with mine drainage.
Explosive storage Fuel storage (oil tanks/coal piles) Vehicle/equipment maintenance area/building Parking areas.....	Discharge acceptable under GP (Note: coverage is unnecessary for drainage exclusively from employee and visitor-type parking areas.)
Power plant Truck wash area.....	Discharge under GP must be composed entirely of stormwater and not combined with mine drainage.
Reclamation-related areas	
Any disturbed area (unreclaimed)..... Reclaimed areas released from reclamation bonds prior to Dec. 17 1990. Partially/inadequately reclaimed areas or areas not released from reclamation bond.	Discharge acceptable under GP only if not in active mining area.

Note: Stormwater runoff from these sources is subject to the AZPDES program for stormwater unless mixed with discharges subject to 40 CFR Part 440 that are regulated by another permit prior to mixing. Non-stormwater discharges from these sources are subject to AZPDES permitting and may be subject to the effluent limitation guidelines under 40 CFR Part 440.

Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless they: (1) drain naturally (or are intentionally diverted) to a point source; and (2) combine with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit is available if the discharge composed entirely of stormwater does not combine with other sources of mine drainage that are subject to 40 CFR Part 440, and that meets other eligibility criteria contained in Part 1.1 of this permit. Permit applicants bear the initial responsibility for determining the applicable technology-based standard for such discharges.

8.G.1.2 *Covered Discharges from Inactive Facilities* - All stormwater discharges.

8.G.1.3 *Covered Discharges from Exploration and Construction of Metal Mining and/or Ore Dressing Facilities* - All stormwater discharges.

8.G.1.4 *Covered Discharges from Facilities Undergoing Reclamation* - All stormwater discharges.

8.G.2 Limitations on Coverage

8.G.2.1 *Prohibition of Stormwater Discharges*

Stormwater discharges not authorized by this permit: discharges from active metal mining facilities that are subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

8.G.2.2 *Prohibition of Non-Stormwater Discharges*

The following discharges are not authorized by this permit: adit drainage, and contaminated springs or seeps discharging from waste rock dumps that do not directly result from precipitation events (see also the standard Limitations on Coverage in Part 1.1.4).

8.G.3 Definitions

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

8.G.3.1 *Mining operation* - Consists of active, inactive, reclamation phases and the exploration and construction phases.

8.G.3.2 *Exploration phase* - Entails exploration and land disturbance activities to delineate the dimensions and financial viability of a metal mining site.

8.G.3.3 *Construction phase* - Includes the initial building of site access roads and initial removal of overburden and waste rock to expose mineable minerals at a mining site. In addition, any subsequent construction activity on undisturbed areas of an existing mine property is also considered part of the construction phase if stormwater discharges are not managed by pre-existing or permanent control measures.

8.G.3.4 *Active phase* - Activities including the extraction, removal or recovery of metal ore. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of "active mining area" found at 40 CFR 440.132(a). The active phase is considered part of "mining operations."

Note: The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

8.G.3.5 *Active metal mining site* - A place where work or other activity related to the extraction, removal, or recovery of metal ore is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of "active mining area" found at 40 CFR 440.132(a).

8.G.3.6 *Inactive metal mining site* - A site or portion of a site where metal mining and/or milling occurred in the past but is not an active site as defined above. An inactive metal mining site has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an AZPDES industrial stormwater permit.

8.G.3.7 *Reclamation phase* - Activities undertaken following the cessation of the "exploration phase" or the "active phase" at a site or a portion of a site, intended to return the land to an appropriate post-mining land use in order to meet applicable Federal and State reclamation requirements or the requirements of Part 8.G.9.1 at a site or portion of a site not subject to Federal and State reclamation requirements. The reclamation phase is considered part of "mining operations."

8.G.3.8 *Stabilization* - A site or portion of a site is "stabilized" when it has implemented all applicable Federal and State reclamation requirements.

8.G.4 Stormwater Discharges Associated with the Exploration and Construction Phases of Mining (Clearing, Grading, and Excavation Activities)

Clearing, grading, and excavation activities being conducted as part of the exploration and construction phases at mining sites are covered under this permit (or may be covered under an alternate AZPDES stormwater permit such as the AZPDES General Permit for Discharge from Construction Activities) if they disturb one acre or more. Exploration and construction activities disturbing less than one acre do not require permit coverage unless they are integrally related to other exploration or construction activities that collectively disturb one acre or more.

For all areas affected by exploration and construction activities that will occur at an active site or previously mined site, the permittee shall select, design, install, and implement the following control measures or their equivalents, as necessary to minimize the discharge of pollutants to stormwater. The control measures selected shall be documented in the SWPPP.

Once the areas subject to construction and exploration activities are stabilized or the area(s) become part of the mining operation, the control measures, inspections, monitoring, and other requirements in Parts 8.G.4 are no longer required; however, the site remains subject to Parts 1 through 7, Parts 8.G.5 through 8.G.9, and all other applicable provisions of this permit.

8.G.4.1 Additional Control Measures

The permittee shall implement, as applicable, control measures for erosion control, sediment control, perimeter control, good housekeeping, material storage, fueling and maintenance, concrete washouts, and non-stormwater discharges. In the SWPPP, identify and describe all temporary and/or permanent control measures to be implemented during the exploration and construction phases.

8.G.4.1.1 *Erosion and Sediment Controls.* Design and implement a combination of erosion and/ or sediment control measures to keep sediment in place and/ or to capture sediment to the extent practicable before it leaves the site. At a minimum, such controls must be designed, installed and maintained to:

- a. Control stormwater volume and velocity within the site to minimize soil erosion;
- b. Control stormwater discharges by minimizing both peak flow rates and total stormwater volume, to minimize erosion;
- c. Phase or sequence exploration and construction activities, as practicable, to minimize the area of disturbance at any one time;
- d. Minimize sediment discharges from the site;
- e. Where practicable, increase sediment removal and maximize stormwater infiltration and/or reuse; and
- f. Where practicable, minimize soil compaction and preserve topsoil.

8.G.4.1.2 *Maintenance of control measures.* The permittee shall maintain all control measures identified in the SWPPP in effective operating condition. Repairs or modifications of control measures shall be accomplished in accordance with Part 2.2.1.2.3.

8.G.4.1.3 *Dewatering.* The permittee shall ensure all discharges from dewatering or basin draining activities, including discharges from dewatering of trenches and excavations, are discharged in a manner that do not cause nuisance conditions, including erosion in receiving channels or on surrounding properties.

8.G.4.1.4 *Pollution Prevention Measures.* Design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

- a. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment

basin or alternative control that provides equivalent or better treatment prior to discharge;

- b. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and
- c. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

8.G.4.1.5 *Prohibited Discharges.* The following discharges are prohibited:

- a. Wastewater from washout of concrete, unless managed by an appropriate control;
- b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials. If concrete washout is conducted at the site, appropriate control measures must be implemented to prevent discharge of pollutants;
- c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- d. Soaps or solvents used in vehicle and equipment washing.

8.G.4.1.6 *Surface Outlets.* When culverts or other surface outlets are present on the site, the permittee shall include measures to sufficiently minimize the threat of erosion at surface outlet locations that prevent the formation of rills and gullies.

8.G.4.1.7 *Good Housekeeping.* (See also Part 2.2.1.2.2) The permittee shall implement practices to ensure litter, debris, and chemicals are prevented from contact with stormwater discharges. These procedures shall include storage practices to minimize exposure of the materials to stormwater, and spill prevention and response practices.

8.G.4.1.8 *Soil Stabilization.* After construction has ceased and until stabilization is achieved or active mining commences at the site, the permittee shall maintain the control measures, in accordance with Part 8.G.4.2, and conduct site inspections at least quarterly.

8.G.4.2 *Additional SWPPP Requirements*

The requirements in Part 8.G.4.2 are applicable to exploration and construction activities.

Note: ADEQ recommends activities associated with the exploration and construction activities be kept as a separate chapter or appendix in the site's SWPPP to distinguish from other mining operations.

8.G.4.2.1 *Nature of Exploration and Construction Activities.* (See also Part 5.1) Document in the site's SWPPP the exploration and construction activities that can potentially affect the stormwater discharges covered by this permit.

8.G.4.2.2 The SWPPP shall describe the nature of the construction and exploration activities, including: a description of the exploration and construction phases on the mining property; and an estimate of the total area of the site (in acres) to be disturbed.

8.G.4.3 *Inspections.* (See also Part 4) Except as provided in Part 8.G.4.1.8, the permittee shall conduct inspections as indicated below to ensure control measures are functional and that the SWPPP is being properly implemented.

8.G.4.3.1 Inspection Schedule.

- a. Inspections shall be conducted once every 30 calendar days and within 24 hours of the end of each measurable storm event.

- b. *Inspection Schedule for Sites within 2.5 miles of a Special Water.* If any discharge point from the construction site is within 2.5 miles upstream of an impaired or outstanding Arizona water, the permittee shall inspect the site at least once every 7 calendar days.

Note: If the inspection day falls on a Saturday or holiday, the inspection may be conducted on the preceding workday. If the inspection day falls on a Sunday, the inspection shall be conducted on the following Monday.

8.G.4.3.2 Location of Inspections. Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures implemented must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of significant off-site sediment tracking.

8.G.4.3.3 Inspection Reports. (See also Part 4.1.1) For each inspection required above, the permittee shall document the findings of the inspections in accordance with Part 4.1.1, and maintain this documentation with the SWPPP. In addition to the information required in Part 4.1.1, the inspection report shall include:

- a. Location(s) of discharges of sediment or other pollutants from the site;
- b. For inspections occurring during or after a measurable storm event, a description of stormwater that is discharging from the site (presence of suspended sediment, turbid water, discoloration, and/or oil sheen, as applicable), when present;
- c. Identification of all sources of non-stormwater discharges occurring at the site and associated control measures in place; and
- d. Identification of material storage areas and, evidence of or potential for, pollutant discharge from such areas.

8.G.4.4 *Monitoring and Reporting Requirements for Discharges to Special Waters.* The permittee shall conduct monitoring and Discharge Monitoring Report form reporting for stormwater discharges resulting from exploration and construction activities that are 2.5 miles of a special water. The visual assessment and analytical monitoring requirements in this subpart are in addition to those required in Part 4.2, Part 6, and Part 8.G.8, but may be combined where appropriate.

In accordance with Part 4.2.3.2 and Part 6.4.2, the permittee is not required to conduct visual assessments or analytical monitoring during adverse conditions.

8.G.5 Additional Control Measures for the Active and Inactive Mining Phases.

8.G.5.1 *Additional Stormwater Controls to be Evaluated.* The permittee shall evaluate whether some or all of the following control measures are necessary in order to meet the requirements of Part 2.1 and implement if necessary. These control measures must be evaluated in addition to those measures identified in Part 2.2.1. The potential pollutants identified in Part 8.G.6.3 shall determine the priority and appropriateness of the control measures selected.

8.G.5.1.1 *Stormwater Diversions:* Consider diversion of stormwater away from potential pollutant sources using one or more of the following measures: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

- 8.G.5.1.2 *Capping*: Consider capping potential pollutant sources. When capping is utilized to minimize pollutant discharges in stormwater, identify the source being capped and the material used to construct the cap.
- 8.G.5.1.3 *Treatment*: If treatment of stormwater (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is determined to be necessary to meet the requirements of Part 2.1, describe the type and location of stormwater runoff is encouraged where practicable. Treated runoff may be discharged as a stormwater source regulated under this permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).
- 8.G.5.2 *Sediment and Erosion Control*. At sites where the active phase has commenced, in addition to measures evaluated pursuant to Part 2.2.1.2.5, the permittee shall implement appropriate erosion and/ or sediment controls, in accordance with Part 8.G.4, when clearing, grading or excavation activities occur in previously undisturbed areas where discharges are not controlled by pre-existing or permanent control measures. The purpose of these sediment and/or control measures is to minimize the discharge of sediment from the newly disturbed areas. Where structural control measures are used for sediment control, such measures shall be installed prior to major land disturbance activities commencing.
- 8.G.5.3 *Certification of Discharge Testing*. (unauthorized non-stormwater discharges) Test or evaluate all outfalls covered under this permit for the presence of specific mining-related non-stormwater discharges such as seeps or adit discharges, or discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 440), such as mine drainage or process water. The certification may be kept with the site's SWPPP consistent with Part 8.G.6.6.

8.G.6 Additional SWPPP Requirements for Mining Operations.

The requirements in Part 8.G.6 are applicable to all mining operations, except inactive and unstaffed sites.

- 8.G.6.1 *Nature of Industrial Activities*. Briefly document in the site's SWPPP the mining and associated activities that can potentially affect the stormwater discharges covered by this permit.
- 8.G.6.2 *Site Map*. (See also Part 5.1.2) Document the following in the SWPPP (as appropriate):
- Location of the site relative to major transportation routes and communities;
 - Site boundaries of co-located facilities;
 - Temporary control measures that may be utilized during the exploration or construction phase;
 - Access and haul roads;
 - Outline of the drainage areas of each stormwater outfall within the site with indications of the types of discharges from the drainage areas; and
 - Location(s) of all permitted discharges covered under an individual AZPDES permit.
 - The locations of the following, if they are located such that they will contribute to discharge from a stormwater outfall covered by this permit:
 - Mining or milling site boundaries; immediate access roads and haul roads;
 - Overburden, materials, soils, or waste storage areas;
 - Outdoor equipment storage, fueling, and maintenance areas;
 - Materials handling areas;
 - Outdoor manufacturing, outdoor storage, and material disposal areas;
 - Outdoor chemicals and explosives storage areas;
 - Reclaimed areas;

- Location of mine drainage, dewatering or other process water to the extent that it has a potential to come into contact with or otherwise impact stormwater;
- Off-site points of discharge for mine dewatering and process water; and
- Boundary of areas that contribute discharges subject to effluent limitations guidelines.

8.G.6.3 *Potential Pollutant Sources.* For each area of the mine or mill site where stormwater discharges associated with industrial activities occur, document in the SWPPP the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. To identify potential pollutants, evaluate these factors: the mineralogy of the ore and waste rock (e.g., acid generating); toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with stormwater; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. Also include a summary of any existing ore or waste rock or overburden characterization data and test results for potential generation of acid rock drainage. If any new data is acquired due to changes in ore type being mined, update the SWPPP with this information.

8.G.6.4 *Documentation of Control Measures.* All control measures implemented at the site shall be documented in the SWPPP, in accordance with Part 8.G.5.1 and Part 5.1.1. If control measures are implemented or planned but are not listed in Part 8.G.5.1 (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in the SWPPP.

8.G.6.5 *Employee Training.* All employee training conducted in accordance with Part 2.2.1.2.8 shall be documented with the SWPPP, or be made electronically available upon request.

8.G.6.6 *Certification of Permit Coverage for Commingled Non-Stormwater Discharges:* If the permittee is able to certify, consistent with Part 8.G.5.3 above, that a particular discharge composed of commingled stormwater and non-stormwater is covered under a separate AZPDES permit, and that permit subjects the non-stormwater portion to effluent limitations prior to any commingling, such certification shall be retained with the SWPPP. This certification must identify the non-stormwater discharges, the applicable AZPDES permit(s), the effluent limitations placed on the non-stormwater discharge by the permit(s), and the points at which the limitations are applied.

8.G.7 Inspection Requirements for the Active Mining Phase (See also Part 4.1)

As required by Part 4.1, the permittee shall conduct routine site inspections at active mine sites at least quarterly unless adverse weather conditions make the site inaccessible. Inspections are only required to cover areas where industrial activities occur that are exposed to precipitation and that contribute to stormwater discharges from the site covered under this permit.

Unless otherwise approved by ADEQ, active sites which discharge to waters designated as OAWs or waters which are impaired for sediment must be inspected monthly. The permittee may submit a request to the Department to reduce the inspection frequency to quarterly at one or more outfalls to an OAW or a water impaired for sediment. The request must be based on the frequencies of discharges and the performance of the control measure(s).

8.G.8 Monitoring and Reporting Requirements (See also Part 6.0)

There are no Part 8.G.8 monitoring requirements for inactive and unstaffed sites, unless specified in Part 6.2.

8.G.8.1 General Analytical Monitoring for Active Copper Ore Mining and Dressing Facilities

The permittee of active copper ore mining and dressing facilities shall sample and analyze stormwater discharges for the pollutants listed in Table 8.G-8.1. Permittees must sample and analyze stormwater discharges, twice per year, once per wet season, beginning in year one of permit coverage.

Table 8.G-8.1	
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter
Subsector G1. Active Copper Ore Mining and Dressing Facilities (SIC 1021)	Total Suspended Solids (TSS)
	Copper

8.G.8.2 Monitoring Requirements for Discharges from Waste Rock and Overburden Piles at Active Metal Mining Facilities

8.G.8.2.1 General Analytical Monitoring

For discharges from waste rock and overburden piles, the permittee shall sample and analyze stormwater discharges for the parameters listed in Table 8.G-8.2. Permittees must sample and analyze stormwater discharges, twice per year, once per wet season, beginning in year one of permit coverage.

Table 8.G-8.2	
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter
Subsector G2. Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores, Except Vanadium; and Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099)	Total Suspended Solids (TSS)
	Turbidity
	pH
	Hardness (as CaCO ₃ ; calc. from Ca, Mg) ¹
	Arsenic, total & dissolved ¹
	Beryllium, total & dissolved ¹
	Cadmium, total & dissolved ¹
	Copper, total & dissolved ¹
	Iron, total & dissolved
	Lead, total & dissolved ¹
	Nickel, total & dissolved ¹
	Selenium, total
	Zinc, total & dissolved ¹

¹ These metals are hardness-dependent and require sampling for water hardness. See Appendix C.

8.G.8.2.2 Additional Analytical Monitoring at Active Mining Facilities (applicable to SIC code)

The permittee shall also conduct additional general analytical monitoring for the parameters in Table 8.G-8.3, twice per year, once per wet season, beginning year one of permit coverage.

Table 8.G-8.3	
Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter
Lead and Zinc Ores (SIC Code 1031)	pH
	Lead, total & dissolved ¹
	Zinc, total & dissolved ¹
Gold and Silver Ores (SIC 1041 and 1044)	pH
	Cyanide (free)
	Silver total & dissolved ¹
Ferroalloy Ores, Except Vanadium (SIC Code 1061)	pH
	Manganese
Uranium-Vanadium-Radium Ore Mining (SIC Code 1094)	Radium, total and dissolved
	Uranium
¹ These metals are hardness-dependent and require sampling for water hardness.	

8.G.9 Termination of Permit Coverage

8.G.9.1 *Termination of Permit Coverage for Sites Reclaimed After December 17, 1990.* A site (or a portion of a site) that was released from applicable state or federal reclamation requirements after December 17, 1990, is not required to maintain coverage under this permit.

If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is not required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 8.G.9.2..

8.G.9.2 *Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990.* A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if:

- (1) Stormwater runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to an exceedance of applicable surface water quality standards in the receiving water;
- (2) Soil disturbing activities related to mining at the sites or portion of the site have been completed;

- (3) The site or portion of the site has been stabilized as necessary to minimize soil erosion;
and
- (4) As appropriate depending on location, size, and the potential to contribute pollutants to stormwater discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart H – Sector H – Coal Mines and Coal Mining-Related Facilities (RESERVED)

RESERVED

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart I – Sector I – Oil and Gas Extraction (RESERVED)

RESERVED

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart J – Sector J – Non-Metallic Mineral Mining and Dressing

The permittee shall comply with Part 8 sector-specific requirements associated with the site’s primary industrial activity and any co-located industrial activities authorized under this permit, as defined in Appendix A. The sector-specific requirements apply to those areas of the site where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.J.1 Covered Stormwater Discharges

The requirements in Subpart J apply to stormwater discharges associated with industrial activity from Active and Inactive Non-Metallic Mineral Mining and Dressing facilities as identified by the SIC Codes specified under Sector J in Table 1-1 of this permit.

- 8.J.1.1 *Covered Discharges from Active Non-Metallic Mineral Mining Facilities.* All stormwater discharges, except for most stormwater discharges subject to the existing effluent limitation guideline at 40 CFR Part 436. Mine dewatering discharges composed entirely of stormwater or uncontaminated groundwater seepage from: construction sand and gravel, industrial sand, and crushed stone mining facilities are covered by this permit.
- 8.J.1.2 *Covered Discharges from Inactive Facilities.* All stormwater discharges.
- 8.J.1.3 *Covered Discharges from Exploration and Construction of Non-Metallic Mineral Mining Facilities.* All stormwater discharges.
- 8.J.1.4 *Covered Discharges from Sites Undergoing Reclamation.* All stormwater discharges.

8.J.2 Limitations on Coverage

Most stormwater discharges subject to an existing effluent limitation guideline at 40 CFR Part 436 are not authorized by this permit. An exception to this is mine dewatering discharges composed entirely of stormwater or uncontaminated groundwater seepage from construction sand and gravel, industrial sand, and crushed stone mining facilities, which are covered under this permit.

8.J.3 Definitions

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

- 8.J.3.1 *Mining operation* - Consists of active, inactive, reclamation phases and the exploration and construction phases.
- 8.J.3.2 *Exploration phase* - Entails exploration and land disturbance activities to delineate the dimensions and financial viability of a non-metallic mineral mining site.
- 8.J.3.3 *Construction phase* - Includes the initial building of site access roads and initial removal of overburden and waste rock to expose mineable minerals at a mining site. In addition, any subsequent construction activity on undisturbed areas of an existing mine property is also considered part of the construction phase if stormwater discharges are not managed by pre-existing or permanent control measures.
- 8.J.3.4 *Active phase* - Activities including the extraction, removal or recovery of minerals. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of “active mining area” found at 40 CFR 440.132(a). The active phase is considered part of “mining operations.”

Note: The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

- 8.J.3.5 *Active Mineral Mining Site* - A site or portion of a site where work or other activity related to the extraction, removal, or recovery of non-metallic minerals is being conducted. For surface mines, this definition does not include any land where grading has returned the earth to a desired contour and reclamation has begun. This definition is derived from the definition of "active mining area" found at 40 CFR 440.132(a).
- 8.J.3.6 *Inactive Mineral Mining Site* - A site or portion of a site where non-metallic mineral mining and/or milling occurred in the past but is not an active site as defined above. An inactive mineral mining site has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials, and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an AZPDES industrial stormwater permit.
- 8.J.3.7 *Reclamation phase* - Activities undertaken, following the cessation of the exploration phase or the "active phase" at a site or a portion of a site, intended to return the land to an appropriate post-mining land use in order to meet applicable Federal and State reclamation requirements or the requirements of Part 8.J.10.1 at a site or portion of a site not subject to Federal and State reclamation requirements. The reclamation phase is considered part of "mining operations".
- 8.J.3.8 *Stabilization* - a site or portion of a site is "stabilized" when it has implemented all applicable Federal and State reclamation requirements.
- 8.J.3.9 *Uncontaminated* - Free from the presence of pollutants attributable to industrial activity.

8.J.4 Stormwater Discharges Associated with the Exploration and Construction Phases of Mining (Clearing, Grading, and Excavation Activities)

Clearing, grading, and excavation activities being conducted as part of the exploration and construction phases at mining sites are covered under this permit (or may be covered under an alternate AZPDES stormwater permit such as the AZPDES General Permit for Discharge from Construction Activities if they disturb one acre or more. Exploration and construction activities disturbing less than one acre do not require permit coverage unless they are integrally related to other exploration or construction activities that collectively disturb one acre or more.

For all areas affected by exploration and construction activities that will occur at an active site or previously mined site, the permittee shall select, design, install, and implement the following control measures or their equivalents, as necessary to minimize the discharge of pollutants to stormwater. The control measures selected shall be documented in the SWPPP.

Once the areas subject to construction and exploration activities are stabilized or the area(s) become part of the mining operation, the control measures, inspections, monitoring, and other requirements in Parts 8.J.4 are no longer required; however, the site is still subject to Parts 1 through 7 and all other applicable provisions of this permit.

- 8.J.4.1 *Additional control measures.* The permittee shall implement, as applicable, control measures for erosion control, sediment control, perimeter control, good housekeeping, material storage, fueling and maintenance, concrete washouts, and non-stormwater discharges. In the SWPPP, identify and describe all temporary and/or permanent control measures to be implemented during the exploration and construction phases.
- 8.J.4.1.1 *Erosion and Sediment Controls.* The permittee shall design and implement a combination of erosion and/ or sediment control measures to keep sediment in place

and/ or to capture sediment to the extent practicable before it leaves the site. At a minimum, such controls must be designed, installed and maintained to:

- a. Control stormwater volume and velocity within the site to minimize soil erosion;
- b. Control stormwater discharges by minimizing both peak flow rates and total stormwater volume to control erosion;
- c. Phase or sequence exploration and construction activities, as practicable, to minimize the area of disturbance at any one time;
- d. Minimize sediment discharges from the site;
- e. Where practicable, increase sediment removal and maximize stormwater infiltration and / or reuse; and
- f. Where practicable, minimize soil compaction and preserve topsoil.

8.J.4.1.2 *Maintenance of control measures.* The permittee shall maintain all control measures identified in the SWPPP in effective operating condition. Repairs or modifications of control measures shall be accomplished in accordance with Part 2.2.1.2.3.

8.J.4.1.3 *Dewatering.* The permittee shall ensure all discharges from dewatering or basin draining activities, including discharges from dewatering of trenches and excavations, are discharged in a manner that do not cause nuisance conditions, including erosion in receiving channels or on surrounding properties.

8.J.4.1.4 *Pollution Prevention Measures.* The permittee shall design, install, implement, and maintain effective pollution prevention measures to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented and maintained to:

- a. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- b. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials present on the site to precipitation and to stormwater; and
- c. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

8.J.4.1.5 *Prohibited Discharges.* The following discharges are prohibited:

- a. Wastewater from washout of concrete, unless managed by an appropriate control;
- b. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials. If concrete washout is conducted at the site, appropriate control measures must be implemented to prevent discharge of pollutants;
- c. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
- d. Soaps or solvents used in vehicle and equipment washing.

8.J.4.1.6 *Surface Outlets.* When culverts or other surface outlets are present on the site, the permittee shall include measures to sufficiently minimize the threat of erosion at surface outlet locations that prevent the formation of rills and gullies.

8.J.4.1.7 *Good Housekeeping.* (See also Part 2.2.1.2.3) The permittee shall implement practices to ensure litter, debris, and chemicals are prevented from contact with

stormwater discharges. These procedures shall include storage practices to minimize exposure of the materials to stormwater, and spill prevention and response practices.

- 8.J.4.1.8 *Soil Stabilization.* After construction has ceased and until stabilization is achieved or active mining commences at the site, the permittee shall maintain the control measures, in accordance with Part 8.J.4.2, and conduct site inspections at least quarterly.

8.J.4.2 *Additional SWPPP Requirements.*

The requirements in Part 8.J.4.2 are applicable to exploration and construction activities.

Note: ADEQ recommends activities associated with the exploration and construction activities be kept as a separate chapter or appendix in the site's SWPPP to distinguish from mining operations.

- 8.J.4.2.1 *Nature of Exploration and Construction Activities.* Document in the site's SWPPP the exploration and construction activities that can potentially affect the stormwater discharges covered by this permit.

- 8.J.4.2.2 The SWPPP shall describe the nature of the construction and exploration activities, including: a description of the exploration and construction phases on the mining property; and an estimate of the total area of the site (in acres) to be disturbed.

- 8.J.4.3 *Inspections.* (See also Part 4.1) Except as provided in Part 8.J.4.1.8, the permittee shall conduct inspections as indicated below to ensure control measures are functional and that the SWPPP is being properly implemented.

8.J.4.3.1 Inspection Schedule

- a. Inspections shall be conducted once every 30 calendar days and within 24 hours of the end of each measurable storm event.
- b. *Inspection Schedule for Sites within 2.5 miles of a Special Water.* If any discharge point from the construction site is within 2.5 miles of an impaired or Outstanding Arizona Water, the permittee shall inspect the site at least once every 7 calendar days.

If the inspection day falls on a Saturday or holiday, the inspection may be conducted on the preceding workday. If the inspection day falls on a Sunday, the inspection shall be conducted on the following Monday.

- 8.J.4.3.2 Location of Inspections. Inspections must include all areas of the site disturbed by clearing, grading, and/or excavation activities and areas used for storage of materials that are exposed to precipitation. Sedimentation and erosion control measures implemented must be observed to ensure proper operation. Discharge locations must be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to waters of the United States, where accessible. Where discharge locations are inaccessible, nearby downstream locations must be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site must be inspected for evidence of significant off-site sediment tracking.

- 8.J.4.3.3 Inspection Reports. (See also Part 4.1.1) For each inspection required above, the permittee shall document the findings of the inspections in accordance with Part 4.1.1, and maintain this documentation with the SWPPP. In addition to the information required in Part 4.1.1, the inspection report shall include:

- a. Location(s) of discharges of sediment or other pollutants from the site;
- b. For inspections occurring during or after a measurable storm event, a description of stormwater that is discharging from the site (presence of suspended sediment, turbid water, discoloration, and/or oil sheen, as applicable), when present;
- c. Identification of all sources of non-stormwater discharges occurring at the site and associated control measures in place;
- d. Identification of material storage areas and, evidence of or potential for, pollutant discharge from such areas.

8.J.4.4 *Monitoring and Reporting Requirements for Discharges to Special Waters*

The permittee shall conduct monitoring and reporting as required in Part 8.J.4.3.1.b for stormwater discharges resulting from exploration and construction activities that are within 2.5 miles upstream of a special water. The visual assessment and analytical monitoring requirements in this subpart are in addition to those required in Part 4.2, Part 6, Part 8.J.8 and Part 8.J.9, but may be combined where appropriate.

In accordance with Parts 4.2.3.2 and 6.4.2, the permittee is not required to conduct visual assessments or analytical monitoring during adverse conditions.

8.J.5 **Additional Control Measures for Active and Inactive Mining Phases**

8.J.5.1 *Additional Stormwater Controls.*

The permittee shall evaluate whether some or all of the following control measures are necessary, and implement as appropriate, in order to meet the requirements of Part 2. These control measures are apart from, or in addition to, the control measures implemented by the permittee to meet the Part 2 effluent limits. The potential pollutants identified in Part 8.J.6.3 shall determine the priority and appropriateness of the control measures selected.

8.J.5.1.1 *Stormwater Diversions:* As necessary, divert stormwater away from potential pollutant sources using one or more of the following measures: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

8.J.5.1.2 *Treatment:* If treatment of stormwater (e.g., chemical or physical systems, oil and water separators, artificial wetlands) is determined to be necessary to meet the requirements of Part 2.2, describe the type and location of treatment used. Passive and/or active treatment of stormwater runoff is encouraged. Treated runoff may be discharged as a stormwater source regulated under this permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Mineral Mining and Processing Point Source Category (40 CFR Part 436), except as those subparts identified in Table 2-2 of this permit.

8.J.5.2 *Sediment and Erosion Control*

At sites where the active phase has commenced, in addition to measures evaluated pursuant to Part 2.2.1.2.5, the permittee shall implement appropriate erosion and/ or sediment controls, in accordance with Part 8.J.4, when clearing, grading or excavation activities occur in previously undisturbed areas where discharges are not controlled by pre-existing or permanent control measures. The purpose of these sediment and/or control measures is to minimize the discharge of sediment from the newly disturbed areas. Where structural control measures are used for sediment control, such measures shall be installed prior to major land disturbance activities commencing.

8.J.5.3 *Certification of Discharge Testing*: Test or evaluate all outfalls covered under this permit for the presence of specific mining-related non-stormwater discharges such as discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 436). The certification may be kept with the site's SWPPP consistent with Part 8.J.6.6.

8.J.6 Additional SWPPP Requirements for Mining Operations

The requirements in Part 8.J.6 are applicable to all mining operations, except inactive and unstaffed sites.

8.J.6.1 *Nature of Industrial Activities*

Document in the site's SWPPP the mining and associated activities that can potentially affect the stormwater discharges covered by this permit.

8.J.6.2 *Site Map* (See also Part 5.1.2)

Document the following in the SWPPP (as appropriate):

- Location of the site relative to major transportation routes and communities;
- Site boundaries of co-located facilities;
- Temporary control measures that may be utilized during the exploration or construction phase;
- Access and haul roads;
- Outline of the drainage areas of each stormwater outfall within the site with indications of the types of discharges from the drainage areas; and
- Location(s) of all permitted discharges covered under an individual AZPDES permit.
- The locations of the following, if they are located such that they will contribute to discharge from a stormwater outfall covered by this permit:
 - Mining or milling site boundaries; immediate access roads and haul roads;
 - Overburden, materials, soils, or waste storage areas;
 - Outdoor equipment storage, fueling, and maintenance areas;
 - Materials handling areas;
 - Outdoor manufacturing, outdoor storage, and material disposal areas;
 - Outdoor chemicals and explosives storage areas; and
 - Reclaimed areas;
- Location of mine drainage, dewatering or other process water;
- Off-site points of discharge for mine dewatering and process water; and
- Boundary of areas that contribute discharges subject to effluent limitations guidelines.

8.J.6.3 *Potential Pollutant Sources*

For each area of the mine site where stormwater discharges associated with industrial activities occur, document in the SWPPP the types of pollutants (e.g., oil, sediment) likely to be present in significant amounts. To identify potential pollutants, evaluate these factors: toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with stormwater; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. If applicable include in the SWPPP a summary of any existing waste rock or overburden characterization data and test results for potential generation of acid rock drainage.

8.J.6.4 *Documentation of Control Measures*

To the extent that any of the control measures in Part 8.J.5.1 are used, the permittee shall document them in the site's SWPPP pursuant to Part 5.1.1. If control measures are

implemented or planned but are not listed in Part 8.J.5.1 (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in the SWPPP.

8.J.6.5 Employee Training

All employee training conducted in accordance with Part 2.2.1.2.8 shall be documented with the SWPPP or be made electronically available upon request.

8.J.6.5 Certification of Permit Coverage for Commingled Non-Stormwater Discharges

If the permittee is able to certify, consistent with Part 8.J.5.2 above, that a particular discharge composed of commingled stormwater and non-stormwater is covered under a separate AZPDES permit, and that permit subjects the non-stormwater portion to effluent limitations prior to any commingling, such certification shall be retained with the SWPPP. This certification must identify the non-stormwater discharges, the applicable AZDPES permit(s), the effluent limitations placed on the non-stormwater discharge by the permit(s), and the points at which the limitations are applied.

8.J.7 Additional Inspection Requirements for the Active Mining Phase (See also Part 4.1)

As required by Part 4.1, the permittee shall conduct routine site inspections at active mining sites at least quarterly unless adverse weather conditions make the site inaccessible. Inspections are only required to cover areas where industrial activities occur that are exposed to precipitation and that contribute to stormwater discharges from the site covered under this permit.

Unless otherwise approved by ADEQ, active sites which discharge to waters designated as OAWs or waters which are impaired for sediment must be inspected monthly. The permittee may submit a request to the Department to reduce the inspection frequency to quarterly at one or more outfalls to an OAW or a water impaired for sediment. The request must be based on the frequencies of discharges and the performance of the control measure(s).

8.J.8 Monitoring and Reporting Requirements (See also Part 6.0)

There are no Part 8.J.8 monitoring requirements for inactive and unstaffed sites, unless required by Part 6.2.

8.J.8.1 General Analytical Monitoring

Table 8.J-8.1 identifies general analytical monitoring that applies to the specific subsectors of Sector J. These monitoring requirements apply to both the site's primary industrial activity and any co-located industrial activities authorized under this permit, which describe the site's activities.

The permittees of Sector J sites shall sample and analyze stormwater discharges for the pollutants listed in Table 8.J-8.1. Permittees must sample and analyze stormwater discharges, twice per year, once per wet season, beginning in year one of permit coverage.

Table 8.J-8.1	
Subsector (Site discharges may be subject to requirements for more than one sector/subsector)	Parameter
Subsector J1. Sand and Gravel Mining (SIC 1442, 1446)	Total Suspended Solids (TSS)
Subsector J2. Dimension and Crushed Stone and Non-metallic Minerals (except fuels) (SIC 1411, 1422-1429, 1481, 1499)	Total Suspended Solids (TSS)

8.J.9 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.)

Table 8.J-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other discharges that may be allowed under this permit. Sites shall sample and analyze stormwater discharges for the pollutants listed in Table 8.J-2, once per year, beginning in year one of permit coverage.

Table 8.J-2		
Industrial Activity	Parameter	Effluent Limitation
Mine dewatering discharges at crushed stone mining facilities (SIC 1422 - 1429)	pH	6.0 – 9.0 s.u.
Mine dewatering discharges at construction sand and gravel mining facilities (SIC 1442)	pH	6.0 – 9.0 s.u.
Mine dewatering discharges at industrial sand mining facilities (SIC 1446)	Total Suspended Solids (TSS)	25 mg/L, monthly avg. 45 mg/L, daily maximum
	pH	6.0 – 9.0 s.u.

8.J.10 Termination of Permit Coverage

8.J.10.1 *Termination of Permit Coverage for Sites Reclaimed After December 17, 1990*

A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is not required to maintain coverage under this permit.

If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is not required to maintain coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 8.J.10.2..

8.J.10.2 *Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990*

A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if:

- (1) Stormwater runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to an exceedance of an applicable surface water quality standards in the receiving water;
- (2) Soil disturbing activities related to mining at the sites or portion of the site have been completed;
- (3) The site or portion of the site has been stabilized as necessary to minimize soil erosion; and
- (4) As appropriate depending on location, size, and the potential to contribute pollutants to stormwater discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

Appendix A

Definitions, Abbreviations, and Acronyms

Appendix A. Definitions, Abbreviations, and Acronyms (for the purposes of this permit).

Accelerated Monitoring - monitoring that is required after one stormwater sampling event result exceeds a numeric effluent limitation guideline.

Approved Total Maximum Daily Loads (TMDLs) – approved TMDLs are those that are developed by the ADEQ and approved by EPA.

Co-located Industrial Activities – industrial activity(ies) in addition to the primary industrial activity, located on-site that are defined by the stormwater regulations at 122.26(b)(14)(i)-(ix) and (xi). An activity at a site is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the stormwater regulations or identified by the SIC code list in Table C-1 of this permit and / or Appendix C of the Industrial Stormwater Permit.

Control Measures – refers to any stormwater control measure or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

Designated Use - a use of a surface water specified in Arizona's surface water quality standards rules, including those uses specified in R18-11-104. Designated uses include domestic water source, full-body contact recreation, partial body contact recreation, fish consumption, aquatic and wildlife (cold water), aquatic and wildlife (warm water), aquatic and wildlife (ephemeral), aquatic and wildlife (effluent dependent waters), agricultural irrigation, and agricultural livestock watering.

Director – means the Director of the Arizona Department of Environmental Quality or an authorized representative.

Discharge – defined in 40 CFR § 122.2 when used without qualification, discharge means the "discharge of a pollutant".

Discharge of a Pollutant – defined in 40 CFR § 122.2 as any addition of any "pollutant" or combination of pollutants to "Waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into Waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Discharge Point – for purposes of this permit, the location(s) where stormwater is discharged from the facility or site.

Effluent Limitations Guideline (ELG) – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of the CWA to adopt or revise effluent limitations.

Ephemeral Water - a surface water that has a channel that is at all times above the water table and that flows only in direct response to precipitation.

Existing Discharger – an operator applying for coverage under this permit for discharges authorized previously under an AZPDES general or individual permit.

Facility or Activity – any AZPDES "point source" or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the AZPDES program.

Feasible – means technologically possible and economically practicable and achievable in light of best industry practices.

Hardness - the sum of the dissolved calcium and magnesium concentrations, expressed as calcium carbonate (CaCO₃) in milligrams per liter.

Impaired Water - waters that have been assessed by ADEQ, under the Clean Water Act, as not attaining a water quality standard for at least one designated use, and are listed on Arizona's current 303(d) List or are identified on Arizona's 305(b) Category 4 list.

Indian Country – (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States, whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe. (18 U.S.C. 1151).

Industrial Activity – the 10 categories of industrial activities included in the definition of “stormwater discharges associated with industrial activity” as defined in 40 CFR 122.26(b)(14)(i)-(ix) and (xi).

Industrial Stormwater – stormwater runoff from industrial activity.

Intermittent Water - A stream or reach of a stream that flows continuously only at certain times of the year, as when it receives water from a spring or from another surface source, such as melting snow.

Materials – includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges. See 40 CFR 122.26(b)(12).

Measureable Storm Event - a storm event that results in a stormwater discharge from one or more discharge points at the site. Measurable storm events must be separated by a minimum of 72 hours between stormwater discharges.

Minimize – reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to Waters of the United States;
- (ii) Designed or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2. See 40 CFR 122.26(b)(4) and (b)(7) & A.A.C R18-9-A901(22).

Natural Background Levels - means surface water quality that was present before any human-caused pollution. Natural background pollutants include those substances that are naturally occurring in native soils, vegetation, or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the site, or pollutants in run-on from neighboring sources that are not naturally occurring (such as run-off from other industrial sites or roadways).

New Discharger – defined in 40 CFR § 122.2 as a site from which there is a discharge, that did not commence the discharge at a particular site prior to August 13, 1979, which is not a new source, and which has never received a finally effective AZPDES permit for discharges at that site. See A.A.C. R18-9-A901(24).

New Source – defined in 40 CFR § 122.2 as any building, structure, facility, site or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced:

- After promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or
- After proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See R18-9-A901(25).

New Source Performance Standards (NSPS) – technology-based standards for sites that qualify as new sources under 40 CFR 122.2 and 40 CFR 122.29.

Non-structural Controls – pollution prevention methods that are not physically constructed, including procedures, schedules, training and other practices to prevent or reduce the discharge of pollutants.

No Exposure – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See 40 CFR 122.26(g).

No Exposure Certification (NEC) - a submission to the Director from an applicant notifying that they intend to obtain a conditional exclusion from permit requirements by certifying that there is no exposure of industrial materials or activities to rain, snow, snowmelt, and/ or stormwater runoff and all industrial materials or activities are protected by a storm-resistant shelter. See 40 CFR 122.26 (g).

Non-Stormwater Discharges – discharges that do not originate from storm events. They can include, but are not limited to, air conditioner condensate, non-contact cooling water, pavement wash water, external building washdown, irrigation water, or uncontaminated ground water or spring water. See Part 1.1.3.

Not-attaining Water - [R18-11-601(11)] a surface water is assessed as impaired, but is not placed on the 303(d) List because:

- a. A TMDL is prepared and implemented for the surface water;
- b. An action, which meets the requirements of R18-11-604(D)(2)(h), is occurring and is expected to bring the surface water to attaining before the next 303(d) List submission;
- c. The impairment of the surface water is due to pollution but not a pollutant, for which a TMDL load allocation cannot be developed.

Notice of Intent (NOI) – the form (electronic or paper) required for authorization of coverage under the Multi-Sector General Permit.

Notice of Intent (NOI) Certificate - the certificate of authorization for permit coverage that is issued immediately by ADEQ after a complete and accurate NOI, along with the applicant's payment, is received by the Department.

Notice of Termination (NOT) – the form (electronic or paper) required for terminating coverage under the Multi-Sector General Permit.

Notice of Termination Summary - the termination summary is issued immediately after a complete and accurate NOT is received by the Department, confirming that permit coverage was terminated.

Operator – any entity with a stormwater discharge associated with industrial activity that meets either of the following two criteria:

- (i) The entity has operational control over industrial activities, including the ability to modify those activities; or
- (ii) The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

Outfall – see “Discharge Point.”

Outstanding Arizona Water – a surface water that has been classified by ADEQ as an outstanding state resource under A.A.C. R18-11-112.

Perennial Water - a surface water that flows continuously throughout the year.

Person – defined in 40 CFR § 122.2 as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof.

Point Source – defined in 40 CFR § 122.2 as any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

Pollutant – defined in 40 CFR § 122.2 as a partial listing from this definition includes: dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal and agricultural waste discharged into water. See A.A.C. R18-9-A901 (27).

Pollutant of Concern – a pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as *causing an impairment in a state's 303(d) list*.

Primary Industrial Activity – includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(ii), (iii), (vi), or (viii); or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), (vii), or (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in 40 CFR 122.26(b)(14) identified above include: (i) activities subject to stormwater effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the

Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites, and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works with a design flow of 1.0 mgd or more.

Qualified Personnel – qualified personnel are those (either the permittee’s employees or outside consultants) who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures.

Receiving Waters – means Waters of the United States.

Reportable Quantity Release – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 and A.R.S. § 49-284 for complete definitions and reportable quantities for which notification is required.

Runoff Coefficient – the fraction of total rainfall that will appear at the conveyance as runoff. See 40 CFR 122.26(b)(11).

Run-On – sources of stormwater that drain from land located upslope or upstream from the regulated site.

Significant Spills and Leaks – are those that have the potential to have an adverse impact on the quality of stormwater discharges from the site. Such spills and leaks may include but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602 and A.R.S. §49-284. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances.

Site – means the land or water where any “facility or activity” is physically located or conducted, including adjacent land used in connection with the facility or activity.

Special Waters - for the purposes of this general permit, reference to special waters include waters identified by the State as impaired, not-attaining, or classified as an Outstanding Arizona Water (OAW).

Spill – the release of a hazardous or toxic substance from its container or containment.

Stormwater – stormwater runoff, snow melt runoff, and surface runoff and drainage. See 40 CFR 122.26(b)(13) & A.A.C. R18-9-A901(36).

Storm Resistant Shelter - a building or structure that is completely roofed and walled, or a structure with only a top cover but no side coverings, provided that any material or industrial activity located under or within the structure is not subject to any run-on and subsequent runoff of stormwater, or mobilization by wind.

Stormwater Discharges Associated with Construction Activity – a discharge of pollutants in stormwater runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See 40 CFR 122.26(b)(14)(x) and 40 CFR 122.26(b)(15).

Stormwater Discharges Associated with Industrial Activity – the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the AZPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, stormwater discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials,

manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at part 401 of this chapter); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to stormwater. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located at industrial sites that are separate from the facility's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with stormwater drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in 40 CFR 122.26(b)(14). The term also includes those facilities designated under the provisions of 40 CFR 122.26(a)(1)(v). See 40 CFR 122.26(b)(14).

Storm Event – a precipitation event that results in a measurable amount of precipitation.

Stormwater Pollution Prevention Team – the group of individuals, identified by name, title or role, that are responsible for the development and modifications of the SWPPP and oversight of compliance with the permit requirements. The Stormwater Team is also responsible for maintaining control measures and taking corrective actions where required. The team may include members who are not employed by the site (such as third party consultants). The individuals on the “Stormwater Pollution Prevention Team” shall be identified in the SWPPP.

Structural Controls - physical or constructed features, such as silt fencing, sediment traps, and detention/retention ponds that minimize the discharge of pollutants.

Substantially Identical Outfalls – outfalls located at the facility that have comparable industrial activities, control measures, exposed materials that may significantly contribute pollutants to stormwater, and similar runoff coefficients of their drainage areas. Monitoring exceptions apply to substantially identical outfalls for visual assessment, general analytical, and impaired waters monitoring. Substantially identical outfall exceptions, does not apply to ELG or OAW monitoring.

Surface Water Quality Standards – a water quality standard defines the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. Arizona's surface water quality standards are set forth in A.A.C. Title 18, Chapter 11, Article 1.

Total Maximum Daily Loads (TMDLs) – a TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges; load allocations for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

Total Nitrogen - the sum of the nitrogen component from ammonia (NH₃), ammonium ion (NH₄⁺), nitrite (NO₂), nitrate (NO₃), and dissolved and particulate organic nitrogen expressed as elemental nitrogen.

Upset – an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).

Waters of the United States (WOTUS) – means “navigable waters” as defined in Arizona Revised Statute, Title 49, Chapter 2, Article 1.

A.2. ABBREVIATIONS AND ACRONYMS

ADHS – Arizona Department of Health Service

BMP – Best Management Practice

CERCLA – Comprehensive Environmental Response, Compensation and Liability Act

CFR – Code of Federal Regulations

CGP- Construction General Permit

COD – Chemical Oxygen Demand

CWA – Clean Water Act (or the Federal Water Pollution Control Act, 33 U.S.C. §1251 *et seq*)

DMR – Discharge Monitoring Report

ELG - Effluent Limitations Guideline

EPA – U. S. Environmental Protection Agency

MGD – Million Gallons per Day

MS4 – Municipal Separate Storm Sewer System

MSGP – Multi-Sector General Permit

NAICS – North American Industry Classification System

NEC - No Exposure Certification

NOI – Notice of Intent

NOT – Notice of Termination

OAW – Outstanding Arizona Water

POTW – Publicly Owned Treatment Works

RCRA – Resource Conservation and Recovery Act

SIC – Standard Industrial Classification

SPCC – Spill Prevention, Control, and Countermeasures

SSC – Suspended Sediment Concentration

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

TSDF – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

WLA – Wasteload Allocation

WQS – Water Quality Standard

**Appendix B
Standard Permit Conditions**

Appendix B. Standard Permit Conditions.

Standard permit conditions in Appendix B are consistent with the general permit provisions required under 40 CFR 122.41 and A.A.C. R-18-9-A905(A)(3).

- 1. Duty to Comply.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(a)(1) and A.R.S. §§ 49-261, 262, 263.01, and 263.02.]
 - a. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act; A.R.S. Title 49, Chapter 2, Article 3.1; and A.A.C. Title 18, Chapter 9, Articles 9 and 10, and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or denial of a permit renewal application.
 - b. The issuance of this permit does not waive any federal, state, county, or local regulations or permit requirements with which a person discharging under this permit is required to comply.

- 2. Duty to Reapply / Continuation of the Expired General Permit.** [A.A.C. R18-9-A905 which incorporates 40 CFR 122.41(b)]
 - a. Upon reissuance of the general permit, the permittee shall file an electronic Notice of Intent (NOI) through myDEQ, within the timeframe specified in the new general permit, and shall obtain new written authorization to discharge from the Director.
 - b. If the Director does not reissue the general permit before the expiration date, the current general permit will be administratively continued and remain in force and effect until the general permit is reissued.
 - c. Any permittee granted authorization to discharge under the general permit before the expiration date automatically remains covered by the continued general permit until the earlier of:
 - i. Reissuance or replacement of the general permit, at which time the permittee shall comply with the NOI conditions of the new general permit to maintain authorization to discharge; or
 - ii. The date the permittee has submitted an electronic Notice of Termination; or
 - iii. The date the Director has issued an individual permit for the discharge; or
 - iv. The date the Director has issued a formal permit decision not to reissue the general permit, at which time the permittee shall seek coverage under an alternative general permit or an individual permit, or cease discharge.

- 3. Need To Halt or Reduce Activity Not a Defense.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(c)]

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- 4. Duty to Mitigate.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(d)]

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

- 5. Proper Operation and Maintenance.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(e)]

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

- 6. Permit Actions.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(f)]
This permit may be modified, revoked and reissued, or terminated for cause. Filing a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 7. Property Rights.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(g)]
This permit does not convey any property rights of any sort, or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, nor any infringement of federal, state, Indian tribe, or local laws or regulations.
- 8. Duty to Provide Information.** [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(h)]
The permittee must furnish to ADEQ, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to ADEQ upon request, copies of records required to be kept by this permit.
- 9. Signatory Requirements.** [A.A.C. R18-9-A905(A)(3)(a), which incorporates 40 CFR 122.41(k) and (l); A.A.C. R18-9-A905(A)(1)(c), which incorporates 40 CFR 122.22]
All Notices of Intent (NOI), Notices of Termination (NOT) and No Exposure Certifications (NEC), must be e-signed in the myDEQ on-line permitting system as follows:
- a. NOIs, NOTs, and NECs:
 - i. For a corporation: By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
 - ii. For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or
 - iii. For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal (or state) agency includes: (1) The chief executive officer (or director) of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
 - b. All reports required by this permit and other information requested by ADEQ as follows:
 - i. A person described in Section 9.a or by a duly authorized representative of that person. A person is a duly authorized representative only if the authorization is made in writing by a person described in Section 9.a and contained in the SWPPP.
 - ii. The authorization must specify either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of manager, operator, superintendent, or position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

- c. All reports, including SWPPP and changes to the SWPPP to document corrective actions taken as required by Part 3.0, and any other compliance reports including, inspection reports, annual reports, monitoring reports, reports on training, corrective action reports and other information required by this permit must be signed by a person described in Appendix B, Subsection 9.a above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
 - i. The authorization is made in writing by a person described in Appendix B, Part 9.a;
 - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may be either a named individual or any individual occupying a named position); and
 - iii. The signed and dated written authorization is included in the SWPPP. A copy must be submitted to ADEQ through myDEQ, upon request.
- d. All other changes to the SWPPP, and other compliance documentation required under Part 5.6, must be signed and dated by the person preparing the change of documentation.
- e. Changes to Authorization. If the information on the electronic NOI filed for permit coverage is no longer accurate because a different owner / operator has responsibility for the overall operation of the facility, a new electronic NOI satisfying the requirements of Part 1.3.1 must be submitted to ADEQ prior to or together with any reports, information, or applications to be signed in accordance with Appendix B, Subsection 9.c above. The change in authorization must be submitted within the time frame specified in Table 1-2 of the permit.
- f. Certification. Any person signing documents under the terms of this permit must make the following certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.
- g. Documents required by this permit that are submitted electronically by, or on behalf of, the regulated facility, any person providing the electronic signature for such documents shall meet all relevant requirements of this section. See 40 CFR 122.22(e).

10. Inspection and Entry. [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(i)]

- a. The permittee must allow ADEQ or an authorized representative to:
 - i. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records are kept under the conditions of this permit;
 - ii. Have access to and copy at reasonable times, any records that are kept under the conditions of this general permit; and
 - iii. Inspect at reasonable times any facility or equipment (including monitoring and control equipment), practices or operations regulated or required under this permit;
 - iv. Sample or monitor at reasonable times any substances or parameters at any location, for the purposes of assuring permit compliance or as otherwise authorized by A.R.S. Title 49, Chapter 2, Article 3.1, and 18 A.A.C. 9, Articles 9 and 10; and

- b. If the facility discharges to an MS4, the permittee must allow representatives of the municipal operator or the separate storm sewer receiving the discharge to inspect the site and obtain copy of records pertaining to the discharge or the conditions of this permit.

11. Monitoring and Records [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(j)].

- a. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.
- b. The permittee must retain records of all monitoring information, all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for at least three (3) years from the date this permit coverage expires or the permit authorization is terminated. This period may be extended by request of the Director at any time. Permittees must submit any such records to ADEQ upon request.
- c. Records of monitoring information must include:
 - i. The date, exact place, and time of sampling or measurements;
 - ii. The individual(s) who performed the sampling or measurements;
 - iii. The date(s) analyses were performed;
 - iv. The time(s) analyses were initiated;
 - v. The individual(s) who performed the analyses;
 - vi. References and written procedures, when available, for the analytical techniques or methods used;
 - vii. The analytical techniques or methods used; and
 - viii. The results of such analyses.
- d. Monitoring must be conducted according to test procedures approved under 40 CFR 136, unless specific test procedures have been otherwise specified in this permit.
- e. Any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained in this permit is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which includes the possibility of fines and/or imprisonment.

12. Reporting Requirements. [A.A.C. R18-9-A905(A)(3)(a) which incorporates 40 CFR 122.41(l)]

- a. Planned changes. The permittee shall give notice to the Director as soon as possible, but no fewer than 30 days, of any planned physical alterations or additions to the permitted facility. Notice is required only when:
 - i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b) (incorporated by reference at A.A.C. R18-9-A905(A)(1)(e)); or
 - ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1) (incorporated by reference at A.A.C. R18-9-A905(A)(3)(b)).
- b. Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit.
 - i. Pursuant to Part 7.1, all monitoring results must be submitted electronically to the Department using the e-Discharge Monitoring Report (e-DMR) form available at www.azdeq.gov
 - ii. If the permittee monitors the discharge of any pollutant more frequently than required by

the permit using test procedures approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the e-DMR (if available), or submitted as a separate report.

- iii. Calculations for all limitations which require averaging of measurements must use an arithmetic mean and non-detected results must be incorporated in calculations as the limit of quantitation for the analysis.
- c. Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.
- d. Twenty-four hour reporting.
 - i. The permittee shall report to ADEQ any noncompliance with this permit which may endanger human health or the environment. The permittee shall orally notify the office listed below within 24 hours:

Arizona Department of Environmental Quality – Water Quality Compliance
1110 W. Washington Street, Mail Code 5514A-1
Phoenix, AZ 85007
Office: 602-771 – 2330
 - ii. A written submission shall also be provided to the office identified above within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - iii. The following shall be included as information which must be reported within 24 hours under this paragraph.
 - 1) Any unanticipated bypass which extends any effluent limitation in the permit.
 - 2) Any upset which exceeds any effluent limitation in the permit.
 - 3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See 40 CFR 122.44(g) which is incorporated by reference at A.A.C. R18-9-A905(A)(3)(d)).
 - iv. ADEQ may waive the written report on a case-by-case basis for reports under this subsection if the oral report has been received within 24 hours.
- e. Other noncompliance. The permittee shall report all instances of noncompliance not otherwise required to be reported under this subsection, at the time monitoring reports are submitted. The reports shall contain the information listed in subsection 12(d).
- f. Other information. When the permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the e-Notice of Intent or in any other report to the Department, the permittee shall promptly submit the facts or information to ADEQ at:

Arizona Department of Environmental Quality
Water Quality Division – MSGP
1110 W. Washington Street, Mail Code 5415A-1
Phoenix, AZ 85007

- 13. Reopener Clause.** [A.A.C. R18-9-C905 which incorporates 40 CFR 122.62(a) or (b)])
The Department may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines, which may be promulgated in the course of the current permit cycle.

- 14. Other Environmental Laws.** No condition of this general permit releases the permittee from any responsibility or requirements under other environmental statutes or regulations. For example, this permit does not authorize the “taking” of endangered or threatened species as prohibited by Section 9 of the Endangered Species Act, 16 U.S.C. 1538. Information regarding the location of endangered and threatened species and guidance on what activities constitute a “taking” are available from the U.S. Fish and Wildlife Service. The permittee must also comply with applicable State and Federal laws, including Spill Prevention Control and Countermeasures (SPCC).
- 15. State or Tribal Law.** [Pursuant to A.A.C. R18-9-A904(C)] Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State or Tribal law or regulation under authority preserved by Section 510 of the Clean Water Act.
- 16. Severability.** The provisions of this general permit are severable, and if any provision of this general permit, or the application of any provision of this general permit to any circumstance, is held invalid, the application of the provision to other circumstances, and the remainder of this general permit shall not be affected.
- 17. Requiring Coverage under an Individual Permit or an Alternative General Permit.**
- a. The Director may require a person authorized by this permit to apply for and/or obtain either an individual AZPDES permit or an alternative AZPDES general permit. Any interested person may petition the Department to take action under this section. The Department may require a permittee authorized to discharge under this permit to apply for an individual permit in any of the following cases:
 - i. A change occurs in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
 - ii. Effluent limitation guidelines are promulgated for point sources covered by the general permit;
 - iii. An Arizona Water Quality Management Plan containing requirements applicable to the point sources is approved;
 - iv. Circumstances change after the time of the request to be covered so that the discharger is no longer appropriately controlled under the general permit, or either a temporary or permanent reduction or elimination of the authorized discharge is necessary;
 - v. If the Director determines that the discharge is a significant contributor of pollutants. When making this determination, the Director shall consider:
 - 1) The location of the discharge with respect to Waters of the United States,
 - 2) The size of the discharge,
 - 3) The quantity and nature of the pollutants discharged to Waters of the U.S., and
 - 4) Any other relevant factor.
 - b. If an individual permit is required, the Director shall notify the discharger in writing of the decision. The notice shall include:
 - i. A brief statement of the reasons for the decision;
 - ii. An application form;
 - iii. A statement setting a deadline to file the application;
 - iv. A statement that on the effective date of issuance or denial of the individual permit, coverage under the general permit will automatically terminate;
 - v. The applicant’s right to appeal the individual permit requirement with the Water Quality Appeals Board under A.R.S. § 49-323, the number of days the applicant has to file a protest challenging the individual permit requirement, and the name and telephone number of the Department contact person who can answer questions regarding the

appeals process; and

- vi. The applicant's right to request an informal settlement conference under A.R.S. 41-1092.03(A) and 41-1092.06.
- c. The discharger shall apply for an individual permit within 90 days of receipt of the notice, unless the Director grants a later date. In no case shall the deadline be more than 180 days after the date of the notice.
- d. If the discharger fails to submit the individual permit application within the time period established in Appendix B.17.c the applicability of the general permit to the discharger is automatically terminated at the end of the day specified by the Director for application submittal.
- e. Coverage under the general permit shall continue until an individual permit is issued or denied unless the general permit coverage is terminated under Appendix B. Subsection 17.d.

18. Request for an Individual Permit.

- a. A permittee may request an exclusion from coverage of a general permit by applying for an individual permit.
 - i. The permittee shall submit an individual permit application under R18-9-B901(B) and include the reasons supporting the request no later than 90 days after publication of the general permit.
 - ii. The Director shall grant the request if the reasons cited by the permittee are adequate to support the request.
- b. If an individual permit is issued to a person otherwise subject to a general permit, the applicability of the general permit to the discharge is automatically terminated on the effective date of the individual permit.

19. Transfer of Coverage. Coverage under this permit is not transferable from one person to another, is non-transferable when the business/ facility name changes, or when there is a change in facility/ site location. Pursuant to Arizona Administrative Code, R18-9-C904, the permittee shall comply with the following conditions:

- a. Transfer of coverage from one operator to a different operator (e.g., site sold to a new company): the new owner /operator must complete and file an electronic Notice of Intent (NOI) in accordance with Part 1.3.1 thirty (30) calendar days prior to taking over operational control of the site. The former owner /operator must file an electronic Notice of Termination (NOT) within thirty (30) days after the new owner /operator has assumed responsibility for the facility.
- b. Name changes of the permittee (e.g., Company "ABC Inc" changes name to "ABC LLC") require the operator to file for a new electronic Notice of Intent (NOI). The facility with the new name must complete and file an electronic NOI in accordance with Part 1.3.1 thirty (30) calendar days before the name change. The facility under the previous name, must file an electronic Notice of Termination (NOT) within thirty (30) days of the name change.
- c. In the event the facility or activity moves to another location, or is otherwise different than the location identified by the permittee on the original NOI, the permittee must submit a new electronic NOI that accurately identifies the regulated facility or activity. The new e-NOI must include all of the information and requirements specified in Part 1.3.1 of this permit, including the corresponding initial fee and be submitted thirty (30) calendar days before the change in location. The facility under the previous location, must file an electronic Notice of Termination (NOT) within thirty (30) days from the change of location.

20. Bypass

- a. Definitions.

1. Bypass means the intentional diversion of waste streams from any portion of a treatment facility
 2. Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- b. Bypass not exceeding limitations. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions Appendix B, Subsections 20.c and 20.d.
- c. Notice
1. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted at least ten days before the date of the bypass.
 2. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Appendix B, Subsection 12.d.
- d. Prohibition of bypass.
1. Bypass is prohibited, and ADEQ may take enforcement action against the permittee for bypass, unless:
 - i. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - ii. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - iii. The permittee submitted notices as required under Appendix B, Subsection 20.c.
 2. ADEQ may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in this Appendix B, Subsection 20.d.

21. Upset

- a. Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Appendix B, Subsection 21.c are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 1. An upset occurred and that the permittee can identify the cause(s) of the upset;
 2. The permitted facility was at the time being properly operated;
 3. The permittee submitted notice of the upset as required in Appendix B, Subsection 12.d (iii); and

4. The permittee complied with any remedial measures required under Appendix B, Subsection 4.
- d. Burden of proof. In any enforcement proceeding, the permittee, who is seeking to establish the occurrence of an upset, has the burden of proof.

22. Retention of Records

Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years from the date permit coverage expires or permit authorization is terminated. This period may be extended by the request of ADEQ at any time.

23. Penalties for Violations of Permit Conditions.

Any permit noncompliance constitutes a violation and is grounds for an enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

- a. Civil Penalties. A.R.S. § 49-262 provides that any person who violates any provision of A.R.S. Title 49, Chapter 2, Article 2, 3 or 3.1 or a rule, permit, discharge limitation or order issued or adopted under A.R.S. Title 49, Chapter 2, Article 3.1 is subject to a civil penalty not to exceed \$25,000 per day per violation.
- b. Criminal Penalties. Any a person who violates a condition of this general permit, or violates a provision under A.R.S. Title 49, Chapter 2, Article 3.1, or A.A.C. Title 18, Chapter 2, Articles 9 and 10 is subject to the enforcement actions established under A.R.S. Title 49, Chapter 2, Article 4, which may include the possibility of fines and/or imprisonment.

Appendix C
Calculating Hardness in Surface Waters Receiving Stormwater Discharges for Hardness
Dependent Metals

Appendix C. Calculating Hardness in Surface Waters Receiving Stormwater Discharge for Hardness Dependent Metals

Overview

Routine analytical monitoring action levels have been adjusted for the hardness-dependent metals (i.e. cadmium, chromium III, copper, lead, nickel, silver, and zinc). For any sectors required to conduct sampling for a hardness dependent metal, the hardness of the receiving water (if stormwater is discharged to a perennial or intermittent stream) or the hardness of the stormwater discharge (if the stormwater discharge is to an ephemeral wash) shall be analyzed in order to calculate the routine analytical monitoring action levels. The action level is calculated through the use of a mathematical formula summarized in Table 1 (See A.A.C. R18-11, Appendix A, Table 2 through Table 9). The action level will be compared to the lowest designated use for that receiving water, for the specific metal using the acute standard. If acute standard exists, the lowest chronic standard would be applied.

Table 1. Hardness Formulas for Determining Acute Water Quality Standards for Dissolved Metals

Designated Use of the Receiving Water	Formula used to calculate action level using hardness
Acute Dissolved Cadmium	
A&W ¹ c ²	$e(1.0166 \cdot \text{LN}(\text{Hardness}) - 3.924) \cdot (1.136672 - \text{LN}(\text{Hardness}) \cdot 0.041838)$
A&W w ³ , and edw ⁴	$e(1.128 \cdot \text{LN}(\text{Hardness}) - 3.6867) \cdot (1.136672 - \text{LN}(\text{Hardness}) \cdot 0.041838)$
A&W ephemeral	$e(1.128 \cdot \text{LN}(\text{Hardness}) - 0.9691) \cdot (1.136672 - \text{LN}(\text{Hardness}) \cdot 0.041838)$
Chronic Dissolved Cadmium	
A&W c ²	$e(0.7409 \cdot \text{LN}(\text{Hardness}) - 4.719) \cdot (1.101672 - \text{LN}(\text{Hardness}) \cdot 0.041838)$
A&W w and edw	$e(0.7852 \cdot \text{LN}(\text{Hardness}) - 2.715) \cdot (1.101672 - \text{LN}(\text{Hardness}) \cdot 0.041838)$
Acute Dissolved Chromium III	
A&W c, w and edw	$e(0.819 \cdot \text{LN}(\text{Hardness}) + 3.7256) \cdot (0.316)$
A&W ephemeral	$e(0.819 \cdot \text{LN}(\text{Hardness}) + 4.9361) \cdot (0.316)$
Chronic Dissolved Chromium III	
A&W c, w and edw	$e(0.819 \cdot \text{LN}(\text{Hardness}) + 0.6848) \cdot (0.86)$
Acute Dissolved Copper	
A&W c, w and edw	$e(0.9422 \cdot \text{LN}(\text{Hardness}) - 1.702) \cdot (0.96)$
A&W ephemeral	$e(0.9422 \cdot \text{LN}(\text{Hardness}) - 1.1514) \cdot (0.96)$
Chronic Dissolved Copper	
A&W c, w and edw	$e(0.8545 \cdot \text{LN}(\text{Hardness}) - 1.702) \cdot (0.96)$
Acute Dissolved Lead	
A&W c, w and edw	$e(1.273 \cdot \text{LN}(\text{Hardness}) - 1.46) \cdot (1.46203 - (\text{LN}(\text{Hardness})) \cdot (0.145712))$
A&W ephemeral	$e(1.273 \cdot (\text{LN}(\text{Hardness})) - 0.7131) \cdot (1.46203 - (\text{LN}(\text{Hardness})) \cdot (0.145712))$
Chronic Dissolved Lead	
A&W c, w and edw	$e(1.273 \cdot \text{LN}(\text{Hardness}) - 4.705) \cdot (1.46203 - (\text{LN}(\text{Hardness})) \cdot (0.145712))$

Acute Dissolved Nickel	
A&W c,w and edw	$e(0.846*LN(Hardness)+2.255)*(0.998)$
A&W ephemeral	$e(0.846*LN(Hardness)+4.4389)*(0.998)$
Chronic Dissolved Nickel	
A&W c, w and edw	$e(0.846*LN(Hardness)+0.0584)*(0.997)$
Acute Dissolved Silver	
A&W c, w, edw, and ephemeral	$e(1.72*LN(Hardness)-6.59)*(0.85)$
Acute Dissolved Zinc	
A&W c, w and edw	$e(0.8473*LN(Hardness)+0.884)*(0.978)$
A&W ephemeral	$e(0.8473*LN(Hardness)+3.1342)*(0.978)$
Chronic Dissolved Zinc	
A&W c, w and edw	$e(0.8473*LN(Hardness)+0.884)*(0.978)$

1. A&W=Aquatic and Wildlife
2. c= cold water
3. w= warm water
4. edw= effluent dependent water

What is Hardness?

Hardness means the sum of the dissolved calcium and magnesium concentrations, expressed as calcium carbonate (CaCO₃) in milligrams per liter (mg/L). Once a sample is analyzed for hardness, the hardness concentration is inserted into the formula in order to calculate the value for that metal. The hardness values that can be entered into the formula(s), can range from a value of “0” to a hardness value that may not exceed 400 mg/L CaCO₃. Hardness must be sampled and analyzed using approved methods as described in 40 CFR Part 136.

The formulas for the specific metals using a hardness value are located in individual tables at the end of A.A.C. R18-11, Appendix A, Table 2 through Table 9. The ADEQ website also provides a calculator spreadsheet to assist in determining the various action levels for routine analytical monitoring and / or water quality standards (i.e., impaired waters) for metals that may be computed using a hardness value. The calculator spreadsheet is entitled ***Inorganic Surface Water Exceedance Calculator*** and is located on the MSGP web page.

How to Determine Hardness for Hardness Dependent Metals

For discharges to:

- Perennial or intermittent water, the hardness of the surface water receiving the discharge shall be analyzed. The hardness sample shall be collected downstream from the point of discharge and collected at the same time the metal sample is collected.
- Ephemeral waters, the hardness shall be of the stormwater discharge leaving the facility. The hardness sample shall be collected at the same time the metal sample is collected.

The permittee may select one of three methods to determine hardness of the perennial or intermittent water surface water receiving the discharge, including: individual hardness sample collected by permittee, hardness sampling by a group of operators that are discharging to the same receiving water, or using reliable and scientifically defensible third-party data (data collected under similar discharging

conditions). Regardless of the method used, the permittee is responsible for documenting the procedures used to determine hardness values.

Third-Party Hardness Data

Permittees can submit receiving waterbody hardness data collected by a third party provided the results are collected consistent with the approved 40 CFR Part 136 methods. The data may come from a local utility, previously conducted stream studies, TMDL implementation plans, peer reviewed literature, other government publications, or data previously collected by the permittee. Data must be less than five (5) years old.

Reporting of Hardness Values

The results of the hardness value(s) shall be reported on the electronic Discharge Monitoring Report (e-DMR). The e-DMR will calculate the permit limits for the hardness dependent metal(s), once the hardness value is entered onto the e-DMR.